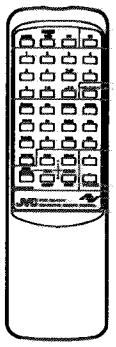
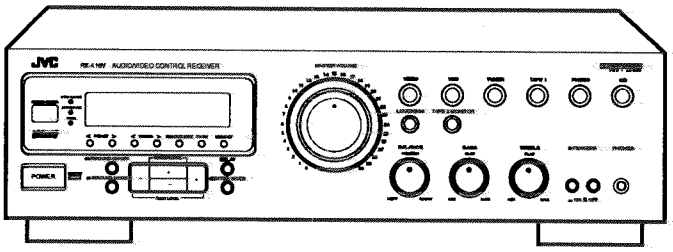
JVC

SERVICE MANUAL

AUDIO/VIDEO CONTROL RECEIVER

RX-416VBK





Area Suffix

A	Australia
BS	the U.K.
EF	Continental Europe
EN	Scandinavia
G	Germany
GI	Italy
UT	Taiwan
U	Other Area

COMPU LINK
Remote
Control Component

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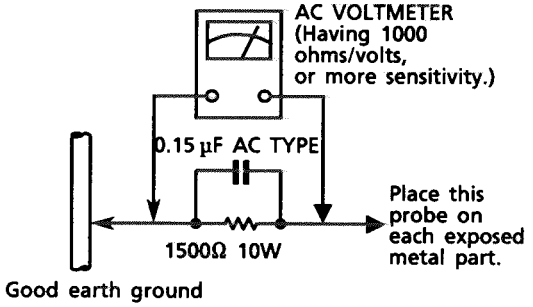
No. 20527
May. 1995

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

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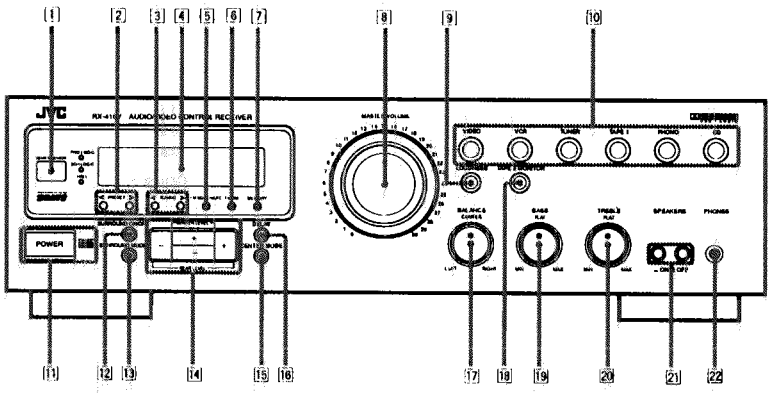
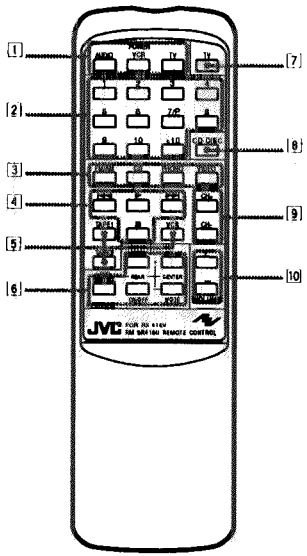
Introduction

Become familiar with the main switches and controls on your RX-416VBK before use.

Switches, Buttons and Controls





Refer to the pages in parentheses for details.

Front Panel

1. Remote sensor
2. PRESET buttons (<, >) (13, 14)
3. TUNING buttons (<, >) (13)
4. Display (10)
5. FM MODE/MUTE button (14)
6. FM/AM button (13)
7. MEMORY button (13)
8. MASTER VOLUME control (11)
9. LOUDNESS button (12)
10. Source selecting buttons (VIDEO, VCR, TUNER, TAPE1, PHONO, CD) (10)
11. POWER button and STANDBY indicator (10)
12. SURROUND ON/OFF button (15, 17, 18)
13. SURROUND MODE button (15, 17, 18)
14. REAR LEVEL/CENTER LEVEL buttons (+/–) (18)
15. CENTER MODE button (17)
16. DELAY button (17)
17. BALANCE control (11)
18. TAPE2 MONITOR button (10, 19)
19. BASS control (11)
20. TREBLE control (11)
21. SPEAKERS 1/2 buttons (11)
22. PHONES jack (12)

Remote Control

1. POWER buttons (10, 20)
2. 10 keys (13, 14, 20)
3. Source selecting buttons (FM/AM, CD, PHONO, VIDEO) (10, 20)
4. Operating buttons for JVC audio/video components (20)
5. Source selecting buttons (TAPE1, TAPE2, VCR) (10, 20)
6. Surround adjustment buttons (17, 18)
7. TV button (20)
8. CD-DISC button (20)
9. CH buttons (+/–) (20)
10. VOLUME buttons (+/–) (11)

Getting Started

This section explains how to connect stereo components and speakers to the RX-416VBK, and how to connect the power supply.

Before Installation

General
- Be sure your hands are dry.
- Turn the power off to all components.
- Read the manuals supplied with the components you are going to connect.

Locations
- Install the receiver in a location that is level and protected from moisture.
- The temperature around the receiver must be between 23° and 104° F (–5° and 40° C).
- Make sure there is good ventilation around the receiver. Poor ventilation could cause overheating and damage the receiver.

Handling the receiver
- Do not insert any metal object into the receiver.
- Do not disassemble the receiver or remove screws, covers, or cabinet.
- Do not expose the receiver to rain or moisture.

Checking the Supplied Accessories

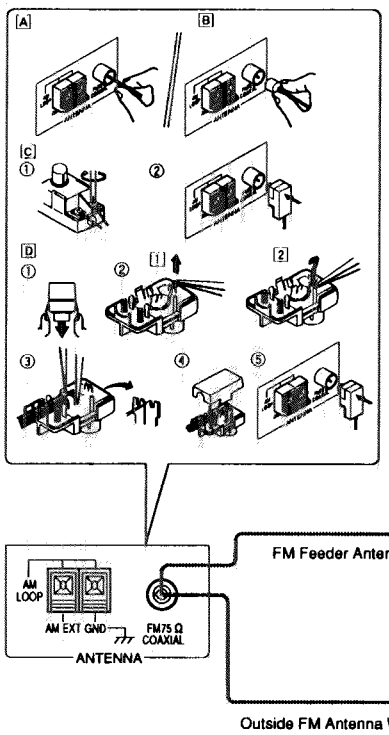
Check to be sure you have all of the following items, which are supplied with the RX-416VBK.
The number in the parentheses indicates quantity of the pieces supplied.

- Remote Control (1)
- Batteries (2)
- AM (MW/LW) Loop Antenna (1)
- FM Wire Antenna (only for Germany) (1)
- FM Feeder Antenna (except for Germany) (1)
- Antenna Adaptor (except for Germany) (1)
- Mains Plug (only for the U.K.) (1)

If anything is missing, contact your dealer immediately.

Connecting the FM and AM (MW/LW) Antennas

FM Antenna Connections



For Germany

A Using the supplied wire antenna

The FM wire antenna supplied can be connected to the FM 75Ω COAXIAL as a temporary measure.
Extend the supplied wire antenna horizontally.

B Using the coaxial type connector (not supplied)

A 75-ohm antenna with coaxial type connector (DIN 45332) should be connected to the FM 75Ω COAXIAL terminal.

For Other European Countries

C Using the supplied feeder antenna

① Attach the feeder antenna to the supplied antenna adaptor as shown in the figure.
② Connect the antenna adaptor to the FM 75Ω COAXIAL terminal.

D Using FM 75-ohm antenna cable (not supplied)

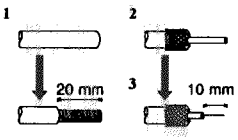
① Open the claws at both sides and remove the cover.
② Move the conductor wire from 1 to 2 using tweezers or similar tool (only when using coaxial cable).
③ Fix the coaxial cable and its core.
④ Put on the cover.
⑤ Connect the supplied antenna adaptor to the FM 75Ω COAXIAL terminal.

Note:
Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. This could cause poor reception.

For Other European Countries
Unfold the loops of the supplied FM feeder antenna and extend them as shown.
Fasten them up in the position which gives you the best FM reception.

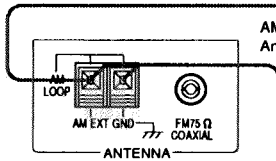
If reception is poor, connect the outside antenna.
Before attaching a 75-ohm coaxial cable (the kind with a round wire going to an outside antenna), disconnect the supplied antenna.

How to strip the 75-ohm coaxial cable

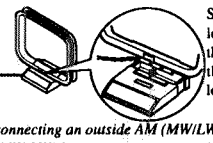


1. **Strip back the outside covering of the 75-ohm coaxial cable to expose the braided metallic mesh.**
2. **Pull the mesh back over the cable as shown.**
3. **Strip the insulation about 10 mm back from the central wire.**
4. **Attach to the supplied antenna adaptor, as shown in the diagram above.**

AM (MW/LW) Antenna Connections



If reception is poor, connect an outdoor single vinyl-covered antenna to the terminal marked AM EXT.

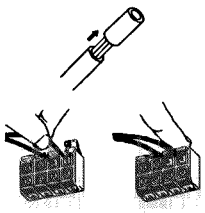


Snap the tabs on the loop into the slots of the base to assemble the AM (MW/LW) loop.

Note :
Even when connecting an outside AM (MW/LW) antenna, keep the indoor AM (MW/LW) loop antenna connected.

Connecting the Speakers

You can connect the following speakers:
- Two sets of front speakers to produce normal stereo sound
- One set of rear speakers to enjoy the surround effect
- One center speaker to produce more effective surround effect (to make human voices clearer)



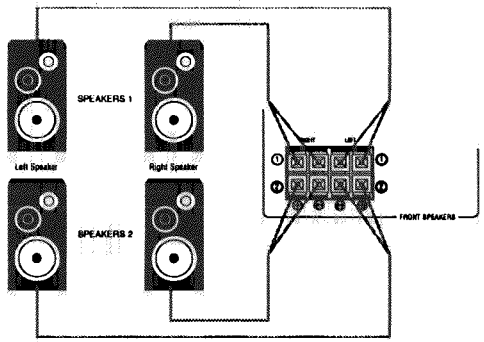
For each speaker, connect one end of the speaker signal cable (not supplied) to the speaker terminal on the rear panel and the other end to the speaker.

1. **Open each terminal.**
2. **Insert the end of the speaker signal cable as shown (be sure to remove the insulation at the end of each wire first).**
3. **Close the terminals to clamp the speaker signal cables firmly in place.**
4. **Connect the black (–) and red (+) terminals on the rear panel to the black (–) and red (+) terminals marked on the speakers.**

CAUTION:
Use speakers with the same impedance as marked near the terminals on the rear panel.

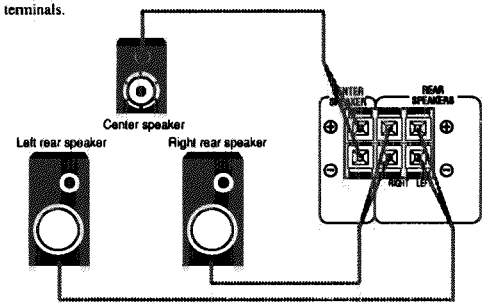
Connecting the front speakers

Connect the front speakers to the FRONT SPEAKERS terminals.



Connecting the rear and center speakers

Connect rear speakers to the REAR SPEAKERS terminals and a center speaker to the CENTER SPEAKER terminals.



Note:
When you connect rear speakers, make sure that both left and right speakers are connected; otherwise, no sound will come out of the rear speakers.

About the speaker impedance of the speakers

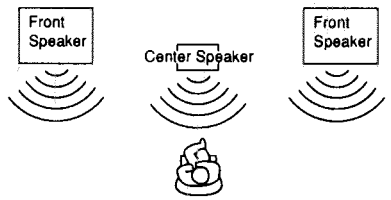
CAUTION:
When connecting speakers, use speakers with the same SPEAKER IMPEDANCE indicated by the speaker terminals.

Notes:
- *The required speaker impedance of the front speakers differs depending on whether or not a center and/ or rear speakers are connected at the same time. Since there are four possible speaker connections with your RX-416VBK, check which one fits your case and use the speaker with the impedance described below.*
- *The required speaker impedance of the front speakers does not differ depending on whether both the FRONT SPEAKERS ① and FRONT SPEAKERS ② terminals are used or only one of them is used.*

CASE 1 **When you connect only front speakers**

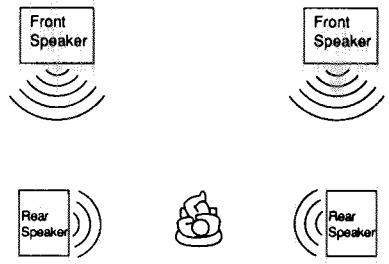
Use front speakers with **4 — 16 ohm** impedance.

CASE 2 **When you connect front speakers and a center speaker**



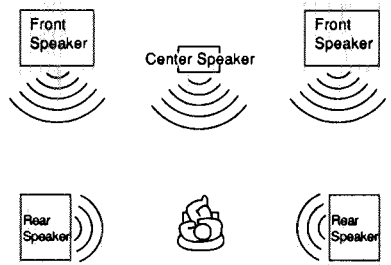
Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Center speaker: **8 — 16 ohm** impedance

CASE 3 **When you connect front and rear speakers**



Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Rear speakers: **8 — 16 ohm** impedance

CASE 4 **When you connect front and rear speakers as well as a center speaker**



Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Rear speakers: **8 — 16 ohm** impedance
- Center speaker: **8 — 16 ohm** impedance

Connecting Audio/Video Components

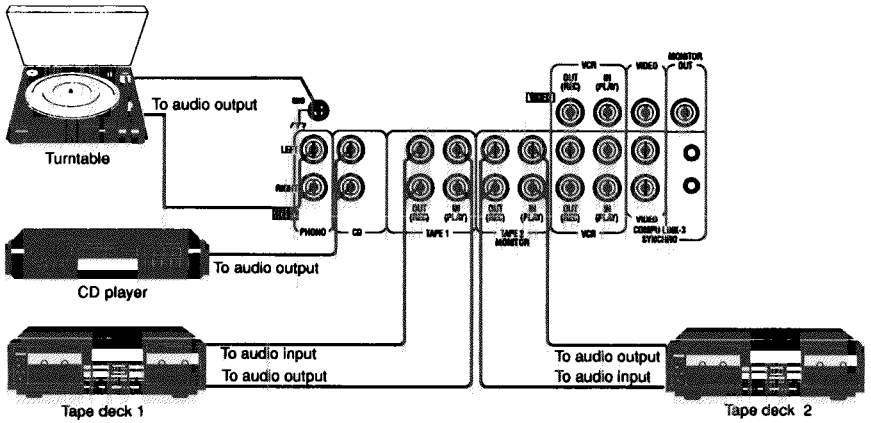
You can connect the following components to the receiver using cables with RCA pin plugs.

Audio Components	Video Components
• Turntable	• VCR
• CD player	• Video disc player
• Tape deck(s)	• TV

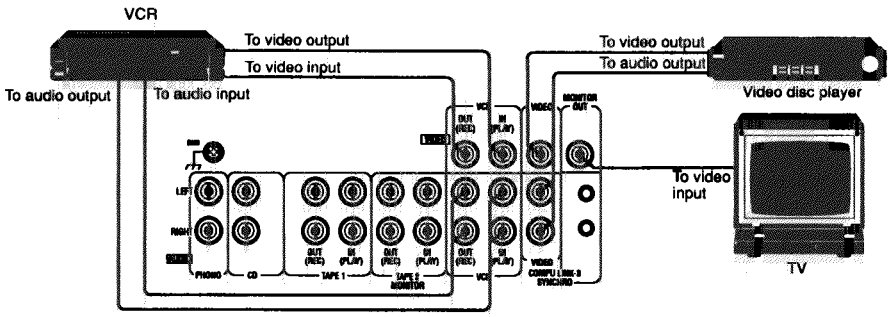
Notes:

- *Both plugs and jacks are color-coded; the red ones are for right audio signals, the white ones for left audio signals, and yellow ones for video signals.*
- *Any turntables incorporating a small-output cartridge such as an MC (moving-coil type) must be connected to this amplifier through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.*
- *If a ground cable is provided for your turntable, connect the cable to the screw marked GND on the rear panel.*

Audio component connections



Video component connections



CAUTION:
If you connect a sound-increasing device such as a graphic equalizer between the source components and this receiver, the sound output through this receiver may be distorted.

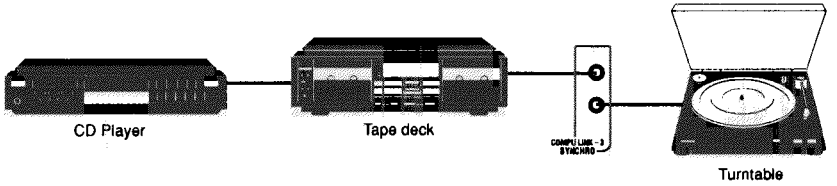
Connecting Audio Components for the COMPU LINK-3 Remote Control System

The COMPU LINK-3 remote control system allows you to control other JVC audio components from the RX-416VBK or vice versa. To use this system, connect your JVC audio components and the RX-416VBK with the cable (monaural mini-plug) supplied with those components.

If your audio component has two COMPU LINK-3 SYNCHRO jacks, you can use either one.
If it has only one COMPU LINK-3 SYNCHRO jack, connect it so that it is the last item in the series of components. (for example, the turntable in the diagram below)

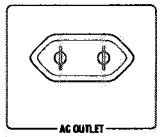
Notes:

- *The COMPU LINK-3 remote control system is the upgraded version of the COMPU LINK-1 and COMPU LINK-2. Even if your components has the COMPU LINK-1 or COMPU LINK-2 jacks, you can still connect it in the COMPU LINK-3 remote control system, but some functions may not work correctly.*
- *For more information about the COMPU LINK-3 (-1 and -2) remote control system, see page 21.*

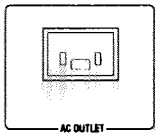


CAUTION:
The COMPU LINK-3 remote control system cannot control the tape deck connected to the TAPE2 MONITOR jacks. Use only the tape deck connected to the TAPE1 jacks.

Power Supply through the RX-416VBK to a Connected Component



For Continental Europe



For the U.K.

You can use the AC outlet on the rear of the RX-416VBK to supply power to an audio component.
This AC outlet is "switched" outlet. So when the RX-416VBK is off (that is, in standby mode), power is not supplied through this outlet. By turning the RX-416VBK on and off, you can turn the connected component on and off at the same time.

Note:
Do not use the AC outlet on the rear of the RX-416VBK to supply power to the component in the COMPU LINK remote control system; otherwise, the COMPU LINK remote control system may not work correctly.

CAUTION:
Do not plug the component to the AC outlet on the rear if the maximum comsumption is greater than indicated by the AC outlet.

Connecting the Power Cord

Before plugging the RX-416VBK into an AC outlet, make sure that all connections have been made. When the power cord is connected, the STANDBY indicator aside the POWER button lights up.

Keep the power cord away from the connecting cables for the TV, VCR, and antenna. The power cord may cause noise or screen interference. We recommend that you use a coaxial cable to connect the antenna, since it is well-shielded against interference.

Notes:

- *A small amount of power is always consumed even in standby mode. To switch off the power completely, unplug the power cord from the AC outlet.*
- *If the power cord is unplugged or a power failure occurs, preset settings will be erased in a few days.*

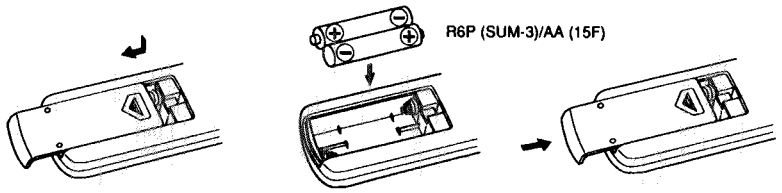
CAUTIONS:

- Do not touch the power cord with wet hands.
- Do not pull on the power cord to unplug the receiver. When unplugging the receiver, always grasp the plug itself so as not to damage the cord.

Putting Batteries in the Remote Control

Before using the remote control, put two supplied batteries first.

1. **On the back of the remote control, press down on the battery cover and slide it out.**
2. **Insert batteries. Make sure to observe the proper polarity: (+) to (+) and (–) to (–).**
3. **Slide the cover in.**



If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6P (SUM-3)/AA (15F) type dry-cell batteries.

CAUTIONS:

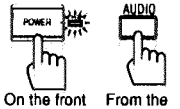
Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity indicated: (+) to (+) and (–) to (–).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

Basic Operations

The following operations are commonly used when you play any sound source.

Turning the Power On and Off



On the front panel — From the remote control

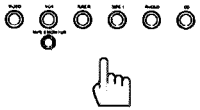
To turn on the power, press the POWER button on the front panel or the AUDIO button on the remote control. The STANDBY indicator goes off.

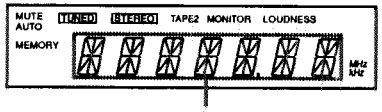
To turn off the power, press the POWER button or AUDIO button on the remote control again. The STANDBY indicator lights up.

Selecting the Source to Play

You need to select the source to listen to before you start playing any source.

Press one of the source selecting buttons so that the source name appears on the display.





Selected source name appears

On the front panel:

VIDEO	View the video component connected to the VIDEO jacks.
VCR	View the video component connected to the VCR jacks.
TUNER	Listen to an FM or AM (MW/LW) broadcast. Each time you press the FM/AM button (see page 13), the band alternates between FM and AM (MW/LW).
TAPE1	Listen to the tape deck connected to the TAPE1 jacks.
PHONO	Listen to a record.
CD	Listen to the CD player.
TAPE2 MONITOR	Listen to the tape deck connected to the TAPE2 MONITOR jacks.

From the remote control:

VIDEO	View the video component connected to the VIDEO jacks.
VCR	View the video component connected to the VCR jacks.
FM/AM*	Listen to an FM or AM (MW/LW) broadcast. Each time you press the button, the band alternates between FM and AM (MW/LW).
TAPE1*	Listen to the tape deck connected to the TAPE1 jacks.
PHONO*	Listen to a record.
CD*	Listen to the CD player.
TAPE2	Listen to the tape deck connected to the TAPE2 MONITOR jacks.

Notes:

- *The TAPE2 MONITOR button on the front panel and the TAPE2 button on the remote control have a different function from other source selecting buttons, since this button allows you to monitor the recording. For more details, see "Recording Monitor" on page 19.*
- ** When you press one of the source selecting buttons on the remote control marked above with an asterisk, the RX-416VBK automatically turns on.*

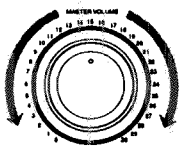
Selecting the Front Speakers

When you have connected two sets of front speakers, you can select which to use. Pressing in the SPEAKERS 1 or SPEAKERS 2 button activates the respective set of speakers.

To use the set of speakers connected to the FRONT SPEAKERS ① terminals, press in the SPEAKERS 1 button (▬ON), and press out the SPEAKERS 2 button (■OFF).
To use the set of speakers connected to the FRONT SPEAKERS ② terminals, press in the SPEAKERS 2 button (▬ON), and press out the SPEAKERS 1 button (■OFF).
To use both sets of speakers, press in both the SPEAKERS 1 and 2 buttons (▬ON).
To use neither set of speakers, press out both the SPEAKERS 1 and 2 buttons (■OFF).

Note:
When only one set of the front speakers is connected to either the FRONT SPEAKERS ① or ② terminals, do not press in both SPEAKERS 1 and 2 buttons (▬ON). If you do, no sound comes out of the front speakers.

Adjusting the Volume



On the front panel

From the remote control

On the front panel:

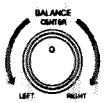
To increase the volume, turn the MASTER VOLUME control clockwise.
To decrease the volume, turn it counterclockwise.

From the remote control:

To increase the volume, press the VOLUME + button.
To decrease the volume, press the VOLUME – button.

CAUTION:
Always set the MASTER VOLUME control to the minimum before starting any source. If the MASTER VOLUME control is left turned up, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

Adjusting the Front Speaker Output Balance



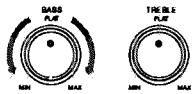
If the sounds you hear from the front right and left speakers are unequal, you can adjust the speaker output balance with the BALANCE control.

To decrease the left channel sound, turn the BALANCE control clockwise.
To decrease the right channel sound, turn it counterclockwise.

Adjusting the Tone

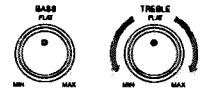
You can increase or decrease the amount of bass and treble reinforcement.

Adjusting the bass



To increase the bass reinforcement, turn the BASS control clockwise.
To decrease the bass reinforcement, turn it counterclockwise.
When set to the FLAT position, no bass reinforcement is applied.

Adjusting the treble



To increase the treble reinforcement, turn the TREBLE control clockwise.
To decrease the treble reinforcement, turn it counterclockwise.
When set to the FLAT position, no treble reinforcement is applied.

Listening at Low Volume (Loudness)

Human ears are not sensitive to bass at low volume. To compensate for this, the loudness function automatically boosts the bass level as you lower the volume.

To use the loudness function, press the LOUDNESS button.
The LOUDNESS indicator lights up on the display.

To turn the function off, press the LOUDNESS button again.
The LOUDNESS indicator goes off.

Recording a Source

You can record any source playing (other than the tape deck connected to the TAPE2 MONITOR jacks) through the RX-416VBK to the tape decks connected to the TAPE1 and TAPE2 MONITOR jacks, and the VCR connected to the VCR jacks at the same time.
While recording, you can listen to the selected sound source at whatever sound and tone settings you like, without affecting the sound levels of the recording.

Notes:
- *You cannot record from the tape deck connected to the TAPE2 MONITOR jacks to the one connected to the TAPE1 jacks (or the VCR jacks).*
- *The output volume level, tone adjustments, as well as surround effects cannot affect the recording.*
- *See also "Recording Monitor" on page 19.*

Listening with Headphones

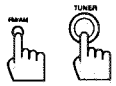
A standard pair of headphones can be connected to the PHONES jack on the front panel. **Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.**

To listen with only headphones
Press out both the SPEAKERS 1 and 2 buttons (■OFF).

Receiving Radio Broadcasts

You can browse through all the stations or use the preset function to go immediately to a particular station.

Tuning in Stations Manually



1. **Press the FM/AM button to select the source (or press the TUNER button on the front panel).**
   The last received station of the last received band is tuned in.
   Each time you press the FM/AM button, the band alternates between FM and AM (MW/LW).

2. **Press the TUNING < or> button repeatedly until you find the frequency you want.**
   Pressing the TUNING > button increases the frequency.
   Pressing the TUNING < button decreases the frequency.

Notes:

- *When you hold down the TUNING < or > button, the frequency keeps changing until you press the TUNING < or > again or a station is tuned in.*
- *When a station of sufficient signal strength is tuned in, the TUNED indicator lights up on the display.*
- *When an FM stereo program is received, the STEREO indicator also lights up.*

Using the Preset Tuning

Once a station is assigned to a channel number, the station can be quickly tuned. You can preset up to 40 stations at random.

Storing the preset stations

1. **Tune in the station you want to preset (see above).**

2. **Press the MEMORY button.**
   "— — CH" and the MEMORY indicator appear on the display for 5 seconds.

3. **Select a channel number within the 5 seconds.**
   On the front panel:
   Press the PRESET < or > button.
   Pressing the PRESET > button increases the channel number.
   Pressing the PRESET < button decreases the channel number.
   From the remote control:
   Press the 10 keys.
   Examples: For channel number 5, press 5. For channel number 15, press +10 then 5.
   For channel number 20, press +10 then 10.

   Note:
   When you use the remote control, be sure that the 10 keys are activated for tuner, not for the CD. (See page 20.)

4. **Press the MEMORY button again while the selected channel number is blinking on the display.**
   The selected channel number stops blinking and the MEMORY indicator goes off, and the station is assigned to the selected channel number.

To cancel a stored preset station
Storing a new station on a used number erases the previously stored one.

CAUTION:
Preset stations may be erased when power is cut off to the RX-416VBK, as when it is unplugged from the AC outlet or a power failure occurs. If the preset stations are lost, simply set the stations again using the above procedure.

Tuning in a Preset Station

On the front panel:

1. **Press the FM/AM button.**
   The last received station of the last selected band is tuned in.
   Each time you press the button, the band alternates between FM and AM (MW/LW).

2. **Press the PRESET < or > button to select a preset channel number.**
   Pressing the PRESET > button changes preset channels in increasing order.
   Pressing the PRESET < button changes preset channels in decreasing order.

On the remote control:

1. **Press the FM/AM button.**
   The last received station of the last selected band is tuned in.
   Each time you press the button, the band alternates between FM and AM (MW/LW).

2. **Press the 10 keys to select a preset channel number.**
   Examples: For channel number 5, press 5. For channel number 15, press +10 then 5.
   For channel number 20, press +10 then 10.

   Note:
   When you use the remote control, be sure that the 10 keys are activated for tuner, not for the CD. (See page 20.)

Selecting the FM Reception Mode

You can change the FM reception mode so that reception will be improved.

When an FM stereo broadcast is hard to receive or noisy
Press the FM MODE/MUTE button on the front panel. The MUTE AUTO indicator goes off on the display. Reception will be improve although you will lose the stereo effect. In this mode, you will hear noise while tuning into the stations.

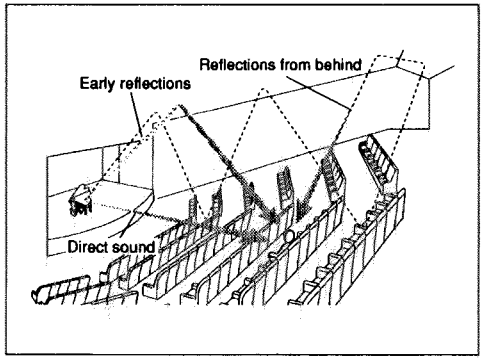
To restore stereo effect
Press the FM MODE/MUTE button again so that the MUTE AUTO indicator lights up on the display. In this mode, when a program is broadcast in stereo, you will hear stereo sound; when in monaural, you will hear monaural sounds. This mode is also useful to suppress static noise between stations.

Using the Surround Processor

The built-in surround processor provides three types of sound programs – - Dolby Pro Logic, Dolby 3-Channel Logic, and JVC's Hall Surround.

What is surround?

The sound heard in a concert hall or a movie theater consists of direct sound and indirect sound: early reflections and reflections from behind. The reflected sounds are always delayed by the distances of the ceiling and walls from the listener. These reflections are some of the most important elements of the acoustic surround.



On JVC's Hall Surround

In order to reproduce a more realistic sound field in your listening room while playing an ordinary stereo source, JVC's Hall Surround has been designed to give you clear vocals and to create the feeling of a concert hall. The sound is reproduced through the front speakers and rear speakers.

On Dolby Surround

The Dolby Surround has been also developed to reproduce the important elements of the acoustic surround at home.
To watch the soundtracks of video software bearing the mark DOLBY SURROUND * which includes the same encoded surround information as found in Dolby Stereo films, the RX-416VBK can provide you with 2 Dolby Surround programs (Dolby Pro Logic and Dolby 3ch Logic).
Dolby Pro Logic: Select this mode when the optional rear speakers are connected.
Dolby 3ch Logic: Select this mode when no rear speakers are connected.

* *Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

Notes:
- *The surround processor has no effect on monaural sources.*
- *The surround processor cannot be used for recording.*

Using JVC's Hall Surround

You need to connect one set of rear speakers to obtain the full effect.

1. **Press the SURROUND ON/OFF button (or the ON/OFF button on the remote control).**
   One of the surround program indicators (PRO LOGIC, 3CH LOGIC, or HALL) lights up on the display.

2. **Press the SURROUND MODE button (or the MODE button on the remote control) repeatedly until the HALL indicator lights up on the display.**

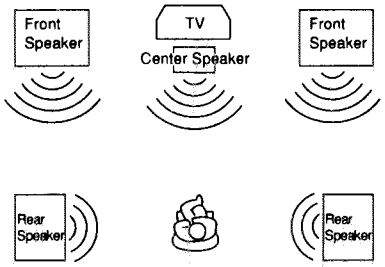
To cancel the Hall Surround, press the SURROUND ON/OFF button (or the ON/OFF button on the remote control) again.

Note:
You can also adjust the delay time (see Step 4 on page 17) and the sound level of the rear speakers (see Step 6 on page 18) for Hall Surround. Once you have adjusted the delay time for the Hall Surround, the RX-416VBK memorizes the setting.

Speaker arrangements for Dolby Surround

The following illustrations show how to obtain the optimum sound environment for various Dolby Surround settings. Try to find the speaker direction and location to create the optimum sound field.

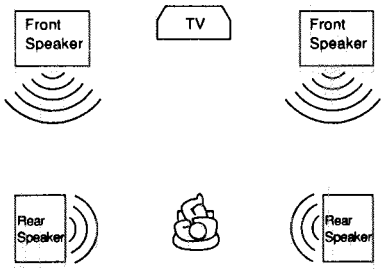
CASE 1 **When you have added a center speaker and rear speakers**



In this case:
1. Select PRO LOGIC.
2. Select NORMAL or WIDE for center mode.

See page 17 for more details.

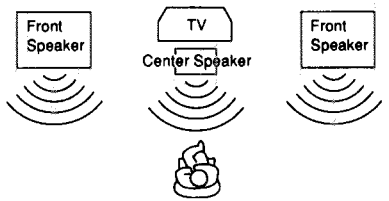
CASE 2 **When you have added rear speakers**



In this case:
1. Select PRO LOGIC.
2. Select PHANTOM for center mode.

See page 17 for more details.

CASE 3 **When you have added a center speaker (without rear speakers)**



In this case:
1. Select 3CH LOGIC.
2. Select NORMAL or WIDE for center mode.

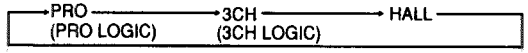
See page 17 for more details.

Preparing for the Dolby Surround

The RX-416VBK memorizes two sets of Dolby Surround adjustments; one for Pro Logic and the other for 3ch Logic. However, the sound levels of center and rear speakers cannot be stored separately.

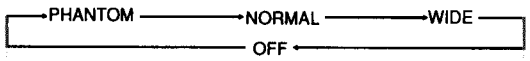
1. **Press the SURROUND ON/OFF button (or the ON/OFF button on the remote control).**
   One of the surround program indicators lights up on the display.

2. **Press the SURROUND MODE button (or the MODE button on the remote control).**
   Each time you press the button, the surround program changes as follows:



PRO LOGIC: Select this mode when you use the rear speakers
3CH LOGIC: Select this mode when you use no rear speakers
HALL: This is JVC's original surround program, and is different from the Dolby Surround. To use this, see page 15.

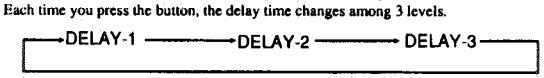
3. **Press the CENTER MODE button.**
   Each time you press the CENTER MODE button, the mode changes as follows.



PHANTOM: Select this mode when you have not connected a center speaker.
NORMAL: Select this mode when the size of the center speaker is smaller than that of the front speakers.
WIDE: Select this mode when the size of the center speaker is the same as that of the front speakers.
OFF: Select this mode to shut off the output of the center channel signal.

Note:
When you have selected 3CH LOGIC in Step 2 above, you cannot select PHANTOM.

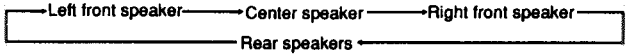
4. **Press the DELAY button to set the delay time of the delayed sound.**
   Each time you press the button, the delay time changes among 3 levels.

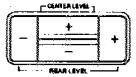


DELAY-1: When your distance to your rear speakers is greater than that to the front speakers.
DELAY-2: When your distance to your rear speakers is almost equal to that to the front speakers.
DELAY-3: When your distance to your rear speakers is less than that to the front speakers.

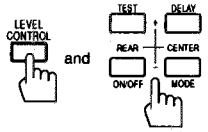
Note:
When you have selected 3CH LOGIC in Step 2 above, you cannot adjust the delay time.

5. **Press the TEST button on the remote control to check your setting.**
   When you press the button, "TEST" starts blinking and a test tone comes out of speakers in the following order:





On the front panel



From the remote control

6. **Set the levels of center and rear speakers.**
   On the front panel:
   Press the CENTER LEVEL +/– button to set the sound level of the center speaker.
   Press the REAR LEVEL +/– button to set the sound level of the rear speakers.
   From the remote control:
   Press the CENTER +/– button while pressing the LEVEL CONTROL button to set the sound level of the center speaker.
   Press the REAR +/– button while pressing the LEVEL CONTROL button to set the sound level of the rear speakers.

Notes:
- *You can adjust these levels in 1dB steps within the range of ±10 dB. The sound levels of the left and right rear speakers will be the same.*
- *You cannot set the sound level of the rear speakers when you have selected 3CH LOGIC.*
- *You cannot set the sound level of the center speaker when you select PHANTOM or OFF for center mode.*
- *Although the sound levels of center and rear speakers can be stored, they are not stored separately for each surround program.*

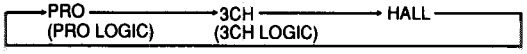
7. **Press the TEST button on the remote control again to finish the preparation.**
   The test tone stops.

Using the Dolby Surround

Once you have set the Dolby Surround adjustments you can use the same adjustments every time you want to enjoy Dolby Surround.

1. **Press the SURROUND ON/OFF button (or the ON/OFF button on the remote control) so that one of the surround program indicator lights up on the display.**

2. **Press the SURROUND MODE button (or the MODE button on the remote control) repeatedly if the surround program indicator (PRO LOGIC or 3CH LOGIC) you want does not light up.**
   Each time you press the button, the display changes to show the following:



3. **Play a sound source which was processed with Dolby Surround and is labeled with** DOLBY SURROUND **mark.**

To cancel the Dolby Surround, press the SURROUND ON/OFF button (or the ON/OFF button on the remote control) again.

Other Features

The RX-416VBK has some other features like recording monitor function and others. By using these useful features, your audio life will be much improved.

Recording Monitor

On the front panel

From the remote control

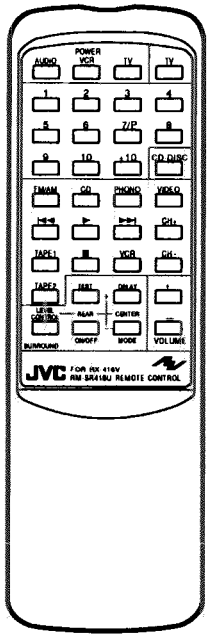
If the tape deck connected to the TAPE2 MONITOR jacks is of the three-head type, you can compare the sound quality of the playing source and of the recording being made on the tape deck.

To use the recording monitor function
Press the TAPE2 MONITOR button on the front panel or the TAPE2 button on the remote control.
The TAPE2 MONITOR indicator lights up on the display. You can hear the sound just recorded on the tape.

To cancel recording monitor function
Press the TAPE2 MONITOR button or the TAPE 2 button again.
The TAPE2 MONITOR indicator goes off, and you hear the sound from the source playing.

Notes:
- *Refer also to the manual supplied with your tape deck.*
- *Do not press the TAPE2 MONITOR (or TAPE2) button if no component is connected to the TAPE2 MONITOR jacks; otherwise, no sound comes out of the speakers*

Using the Remote Control



You can operate JVC's audio and video components with this receiver's remote control, since control signals for JVC components are preset in the remote control.
To operate these components with the remote control, first select a source with the source selecting buttons on the remote control. Then, operate that source using the remote control.

Note:
If you choose a source on the front panel directly, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using buttons on the remote control.

After pressing the FM/AM button, you can perform the following operations:

FM/AM	Alternates between FM and AM (MW/LW).
1 — 10, +10	Selects a preset channel number directly To select channel number 5, press 5. For channel number 15, press +10, then 5. For channel number 20, press +10, then 10.

After pressing the CD button, you can perform the following operations on a CD player:

►	Starts playing
⏮	Returns to the beginning of the current track
⏭	Skips to the beginning of the next track
■	Stops playing
1 — 10, +10	Selects a track number directly To select track number 5, press 5. For track number 15, press +10, then 5. For track number 20, press +10, then 10.

After pressing the TAPE1 button, you can perform the following operations on a tape deck:

►	Starts playback
⏮	Fast winds a tape from right to left
⏭	Fast winds a tape from left to right
■	Stops operation

After pressing the VCR button, you can perform the following operations on a VCR:

►	Starts playback
⏮	Rewinds a video tape
⏭	Fast winds a video tape
■	Stops operation
CH+/–	Changes TV channels on a VCR

Note:
While you are playing the source other than VCR—such as the CD player or tape deck, you cannot operate the VCR using the remote control.

After pressing the TV button (located at the upper rightmost portion of the remote control, not the one in the POWER section), you can perform the following operations on TV:

CH+/–	Changes TV channels

Notes:
- *When you press the TV button (located at the upper rightmost portion of the remote control, not the one in the POWER section), the TV's input mode changes to TV.*
- *You can also turn the VCR and TV on and off by pressing the VCR or TV button in the POWER section of the remote control.*

After pressing the CD-DISC button, you can perform the following operations on a CD player-changer:

1 — 6, 7/P	Select the number of a disc installed in a CD player-changer. Then continue to operate the CD player as described above.

Note:
If you have the CD player-changer XL-MC100C and XL-MC100M, 1 — 6 buttons function as the DISC SKIP button.
- *Press 2, 4, or 6 to skip to the next disc.*
- *Press 1, 3, or 5 to skip back to the previous disc.*

COMPU LINK Remote Control System

COMPU LINK Remote Control System

The COMPU LINK remote control system allows you to operate JVC audio components through the remote sensor on the RX-416VBK.
To use this remote control system, you need to connect JVC audio components through the COMPU LINK-3 SYNCHRO jacks (see page 8) in addition to the connections using cables with RCA pin plugs (see page 7).
This remote control system allows you to use four functions listed below.

■ Remote Control through the Remote Sensor on the RX-416VBK

You can control all audio components through the remote sensor on the RX-416VBK using this remote control.
For details, see page 20.

Note:
Aim the remote control directly at the remote sensor on the RX-416VBK.

■ Automatic Source Selection

When you press the play (►) button on a connected component or on its own remote control, the RX-416VBK automatically turns on and changes the source to the component. On the other hand, if you select a new source on the RX-416VBK or the remote control, the selected component begins playing immediately.
In both cases, the previously selected source continues playing without sound for a few seconds.

■ Automatic Power On/Off (only possible with the COMPU LINK-3 connection)

Both the CD player and tape deck turn on and off with the RX-416VBK.
When you turn on the RX-416VBK, the CD player or tape deck will turn on automatically, depending which component has been previously selected.
When you turn off the RX-416VBK, both the CD player and tape deck will turn off.

■ Synchronized Recording

Synchronized recording means the tape deck starts recording as soon as a CD or record begins playing.

To use synchronized recording, follow these steps:

1 **Put a tape in the tape deck, and a disc in the CD player (or a record on the turntable).**
2 **Press the record (●) button and the pause (II) button on the tape deck at the same time.**
This puts the tape deck into recording pause.

Note:
If you do not press the record (●) button and pause (II) button at the same time, the synchronized recording feature will not operate.

3 **Press the play (►) button on the CD player or on the turntable.**
The source changes on the RX-416VBK, and as soon as play starts, the tape deck starts recording.
When the play ends, the tape deck enters recording pause, and stops 4 seconds later.

Notes:
- *During synchronized recording, the selected source cannot be changed.*
- *If your CD player is playing in program mode, a 4-second blank is recorded between tracks so that the music scan feature of your tape deck can be used on the recorded tape.*
- *If the power of any component is shut off during synchronized recording, the COMPU LINK remote control system may not operate properly. In this case, you must start again from the beginning.*
- *Refer also to the manuals supplied with your CD player and tape deck.*

CAUTION:
The COMPU LINK-3 remote control system cannot control the tape deck connected to the TAPE2 MONITOR jacks. Use only the tape deck connected to the TAPE1 jacks.

Troubleshooting

Use this chart to help you solve daily operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display does not light up	The power cord not plugged in	Plug the power cord into an AC outlet
No sound from speakers	Speaker wires not connected	Check speaker wiring and reconnect if necessary
	The SPEAKERS buttons are not set correctly	Press the SPEAKERS buttons in or out correctly
	An incorrect source is selected	Select the correct source
	The TAPE2 MONITOR indicator lights up when no component is connected to the TAPE2 MONITOR jacks	Press the TAPE2 MONITOR (or TAPE2) button so that the indicator goes off
Sound from one speaker only	Speaker wires are not connected properly	Check speaker wiring and reconnect if necessary
	The BALANCE control is set to one extreme	Adjust the BALANCE control properly
Continuous hiss or buzzing during FM reception	Incoming signal is too weak	Adjust the antenna
	The station is too far away	Select a new station
	An incorrect antenna is used	Check with your dealer to be sure you have a correct antenna
	Antennas are not connected properly	Check connections
Occasional cracking noise during FM reception	Ignition noise from automobiles	Move the antenna farther from automobile traffic
Howling during record playing	Your turntable is too close to speakers	Move speakers away from the turntable
Remote control does not work	There is an obstruction in front of the remote sensor on the RX-416VBK	Remove the obstruction
	Batteries are weak	Replace batteries

Specifications

Amplifier

Output Power	At Stereo operation	55 watts per channel, min. RMS, both channels driven into 4 ohms at 1 kHz with no more than 0.9% total harmonic distortion (IEC268-3/DIN).
		50 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion (IEC268-3/DIN).
		40 watts per channel, min. RMS, both channels driven into 8 ohms, 20 Hz to 20 kHz with no more than 0.06% total harmonic distortion.
	At Surround operation	
	Front Channels	50 watts per channel, min. RMS, driven into 8 ohms at 1 kHz with no more than 0.7% total harmonic distortion.
	Center channel	50 watts, min. RMS, driven into 8 ohms at 1 kHz, with no more than 0.7% total harmonic distortion .
	Rear channels	12.5 watts per channel, min. RMS, driven into 8 ohms at 1kHz, with no more than 0.7% total harmonic distortion
Total Harmonic Distortion (8 ohms, 1 kHz)		0.06 %* at 40 watts output (* Measured by JVC Audio Analysis System)
Frequency Response (8 ohms)	PHONO	20 Hz to 20 kHz (±1 dB)
	CD,TAPE1,TAPE2 MONITOR,VCR,VIDEO	20 Hz to 20 kHz (±1 dB)
Signal-to-Noise Ratio ('66 IHF/DIN)	PHONO	70 dB/66 dB
	CD,TAPE1,TAPE2 MONITOR,VCR,VIDEO	87 dB/67 dB
RIAA Phono Equalization		±0.5 dB (20 Hz to 20 kHz)
Audio Input Sensitivity/ Impedance (1 kHz)	PHONO	2.5 mV/47 k ohms
	CD,TAPE1,TAPE2 MONITOR,VCR,VIDEO	200 mV/47 k ohms
Audio Output Level	TAPE1,TAPE2 MONITOR,VCR	200 mV
Tone Control Range	BASS	+8 ±2dB, –8 ±2dB (at 100 Hz)
	TREBLE	+8 ±2dB, –8 ±2dB (at 10 kHz)
Video Input Sensitivity/ Impedance	VCR, VIDEO	1 Vp-p/75 ohms
Video Output Level	VCR, MONITOR OUT	1 Vp-p (at 1 Vp-p input)
Synchronization		negative
Signal-to-Noise Ratio		45 dB

FM tuner (IHF)

Tuning Range		87.5 MHz to 108.0 MHz
Usable Sensitivity		12.7 dBf (1.2 µV/75 ohms)
50 dB Quieting Sensitivity	Monaural	16.3 dBf (1.8 µV/75 ohms)
	Stereo	38.3 dBf (22.5 µV/75 ohms)
Signal-to-Noise Ratio (IHF-A weighted)	Monaural	80 dB at 85 dBf
	Stereo	73 dB at 85 dBf

Total Harmonic Distortion	Monaural	0.15 % at 1 kHz
	Stereo	0.2 % at 1 kHz
Stereo Separation at REC OUT		40 dB at 1 kHz
Capture Ratio		1.5 dB (10 mV)
Alternate Channel Selectivity		60 dB: (±400 kHz)
Frequency Response		30 Hz to 15 kHz: (+0.5 dB, –3 dB)

AM tuner

Tuning Range	MW:	522 kHz to 1,629 kHz
	LW:	144 kHz to 288 kHz
Usable Sensitivity	MW: Loop antenna	300 µV/m
	External antenna	30 µV
	LW: Loop antenna	600 µV/m
Signal-to-Noise Ratio		50 dB (100 mV/m)

General

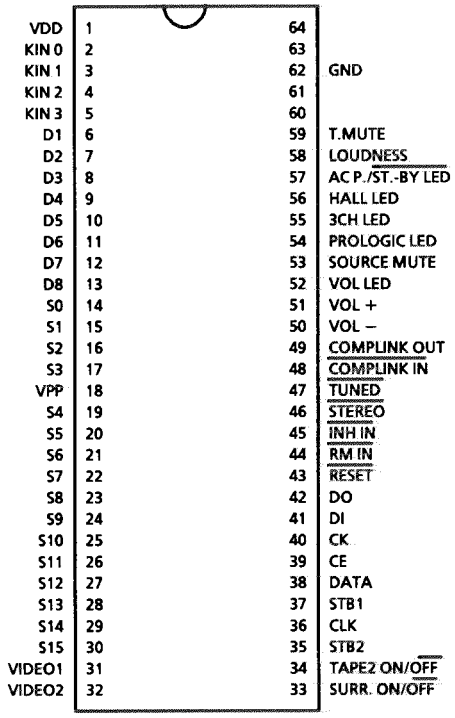
Power Requirements	AC 230V~, 50 Hz
Power Consumption	225 watts 5 watts (in standby mode)
Dimensions (W x H x D)	435 x 126 x 344 mm (17 3/16 x 5 x 13 9/16 inches)
Mass	8.4 kg (18.6 lbs)

Design & specifications are subject to change without notice

Description of ICs

■ MN171202J5Y1 (IC401) : SYSTEM CONTROLLER

1. Terminal Layout



2.Key Matrix

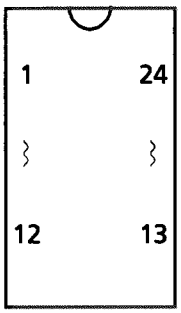
	KEY IN 0 (PIN2)	KEY IN 1 (PIN3)	KEY IN 2 (PIN4)	KEY IN 3 (PIN5)
KEY OUT 0 (PIN6)	PHONO (S401)	CD (S402)	TUNER (S403)	TAPE 1 (S404)
KEY OUT 1 (PIN7)	TAPE 2 MONITOR (S405)	VCR (S406)	VIDEO (S407)	LOUDNESS (S408)
KEY OUT 2 (PIN8)	BAND FM/AM (S409)	FM MODE MUTE (S410)	FREC. DOWN (S411)	FREC. UP (S412)
KEY OUT 3 (PIN9)	POWER (S413)	MEMORY (S414)	PRESET DOWN (S415)	PRESET UP (S416)
KEY OUT 4 (PIN10)	SURROUND (S417)	SURROUND MODE (S418)	REAR – (S419)	REAR + (S420)
KEY OUT 5 (PIN11)	DELAY (S421)	CENTER MODE (S422)	CENTER – (S423)	CENTER + (S424)

3. Description

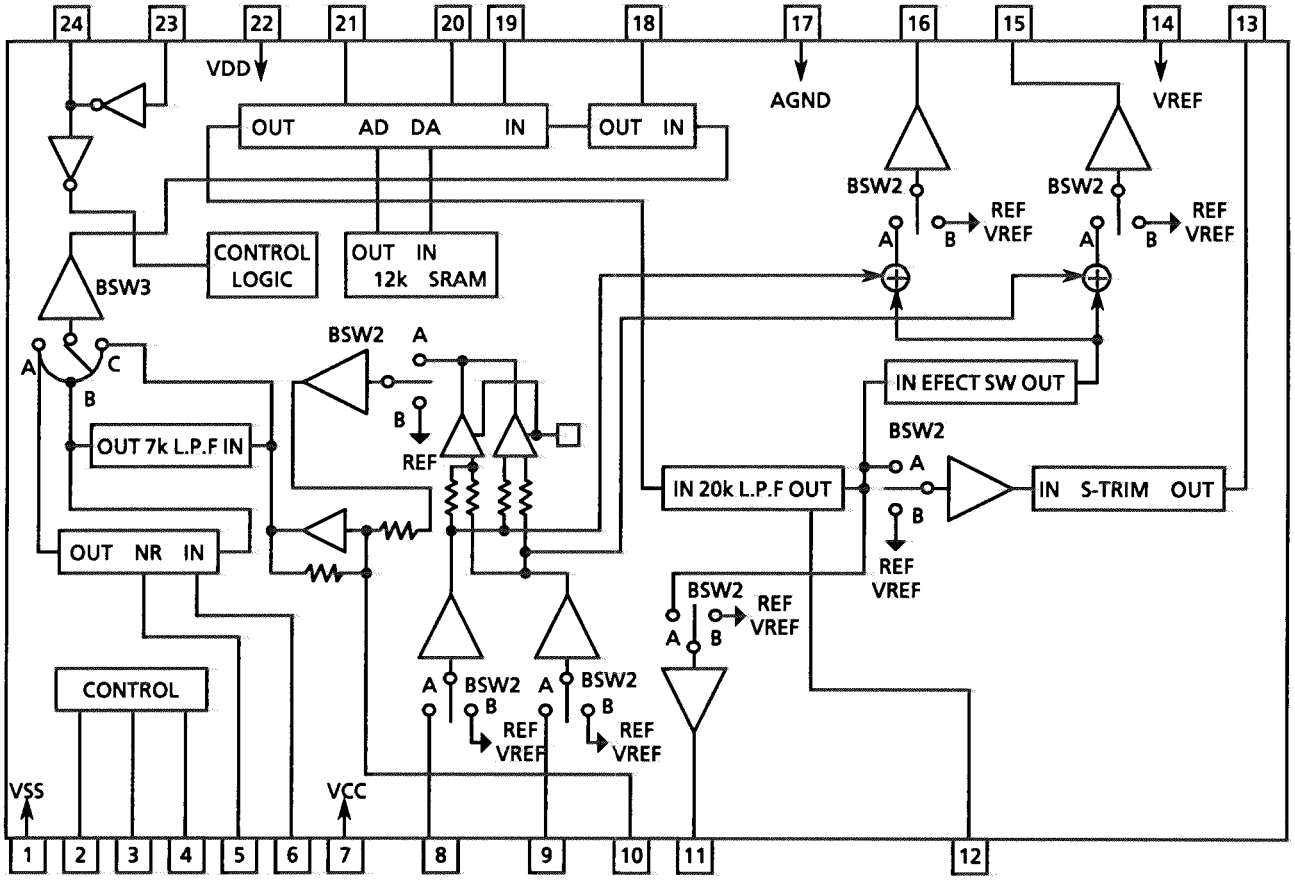
Pin No.	Symbol	I/O	Description	Pin NO.	Symbol	I/O	Description
1	VDD	--	Power supply	33	SURR. ON/OFF	O	Surround ON/OFF control
2	KIN 0	I	Key matrix input	34	TAPE2 ON/OFF	O	TAPE2 ON/OFF control
3	KIN 1	I	Key matrix input	35	STB2	O	Strobe signal for IC601 and IC641
4	KIN 2	I	Key matrix input	36	CLK	O	Clock output for IC601,641 and IC321
5	KIN 3	I	Key matrix input	37	STB1	O	Strobe signal for IC321
6	D1/KO0	O	Grid control signal (Key matrix output)	38	DATA	O	Data for IC601,641 and IC321
7	D2/KO1	O	Grid control signal (Key matrix output)	39	CE	O	Chip select signal for IC121
8	D3/KO2	O	Grid control signal (Key matrix output)	40	CK	O	Clock output (To IC121)
9	D4/KO3	O	Grid control signal (Key matrix output)	41	DI	I	Data from PLL synthesizer (From IC121)
10	D5/KO4	O	Grid control signal (Key matrix output)	42	DO	O	PLL synthesizer control data (To IC121)
11	D6/KO5	O	Grid control signal (Key matrix output)	43	RESET	I	Reset signal input
12	D7	O	Grid control signal	44	RM IN	I	Remote control signal input
13	D8	O	Grid control signal	45	INH IN	I	Inhibit signal input
14	S0	O	Segment control signal	46	STEREO	O	STEREO indication control
15	S1	O	Segment control signal	47	TUNED	O	TUNED indication control
16	S2	O	Segment control signal	48	COMPLINK IN	I	Compulink signal input
17	S3	O	Segment control signal	49	COMPLINK OUT	O	Compulink signal output
18	VPP	--	Power supply for FL display	50	VOL –	O	Volume control signal
19	S4	O	Segment control signal	51	VOL +	O	Volume control signal
20	S5	O	Segment control signal	52	VOL LED	O	Volume indication control
21	S6	O	Segment control signal	53	SOURCE MUTE	O	Source muting
22	S7	O	Segment control signal	54	PROLOGIC LED	O	PROLOGIC indication control
23	S8	O	Segment control signal	55	3CH LED	O	3CH indication control
24	S9	O	Segment control signal	56	HALL LED	O	HALL indication control
25	S10	O	Segment control signal	57	AC P./ST.-BY LED	O	STAND-BY indication control
26	S11	O	Segment control signal	58	LOUDNESS	O	Loudness ON/OFF control
27	S12	O	Segment control signal	59	T.MUTE	O	Tuner muting control signal
28	S13	O	Segment control signal	60	—	--	Connected to GND
29	S14	O	Segment control signal	61	—	--	Non connection
30	S15	O	Segment control signal	62	GND	--	GND
31	VIDEO1	O	Video control signal (To IC661)	63	OSC1	--	Oscillation terminal
32	VIDEO2	O	Video control signal (To IC661)	64	OSC2	--	Oscillation terminal

■ LV1011 (IC641) : Dolby Surround Passive Decoder

1. Terminal Layout



2. Block Diagram

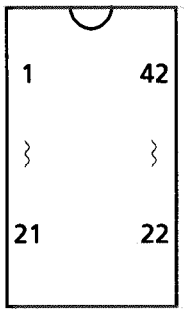


3. Pin Functions

Pin No.	Symbol	I/O	Functions
1	DGND	--	Digital GND
2	CLK	I	Serial interface clock
3	DATA	I	Serial interface data input
4	STB	I	Strobe signal input
5	NR-DET	--	Capacitor for noise reduction detection
6	NR-IREF	--	Resistor for noise reduction reference current
7	VCC	--	Supply
8	L-IN	I	Left channel signal input
9	R-IN	I	Right channel signal input
10	S-IN	I	Surround signal input
11	DELAY-OUT	--	Not used
12	DC-CUT	--	Capacitor for DC-cut
13	S-OUT	O	Surround signal output
14	VREF	--	Analog reference voltage
15	R-MIX-OUT	--	Not used
16	L-MIX-OUT	--	Not used
17	ADND	--	Analog ground
18	DC-CUT	--	Capacitor for DC-cut
19	D/A	--	Capacitor for integrator
20	NOISE SHAPER	--	Capacitor for noise shaper
21	A/D	--	Capacitor for integrator
22	VDD	--	Supply for the digital section
23	OSC	--	Oscillation terminal
24	OSC	--	Oscillation terminal

■ LA2785 (IC601) : Dolby Pro Logic Surround Signal Processor

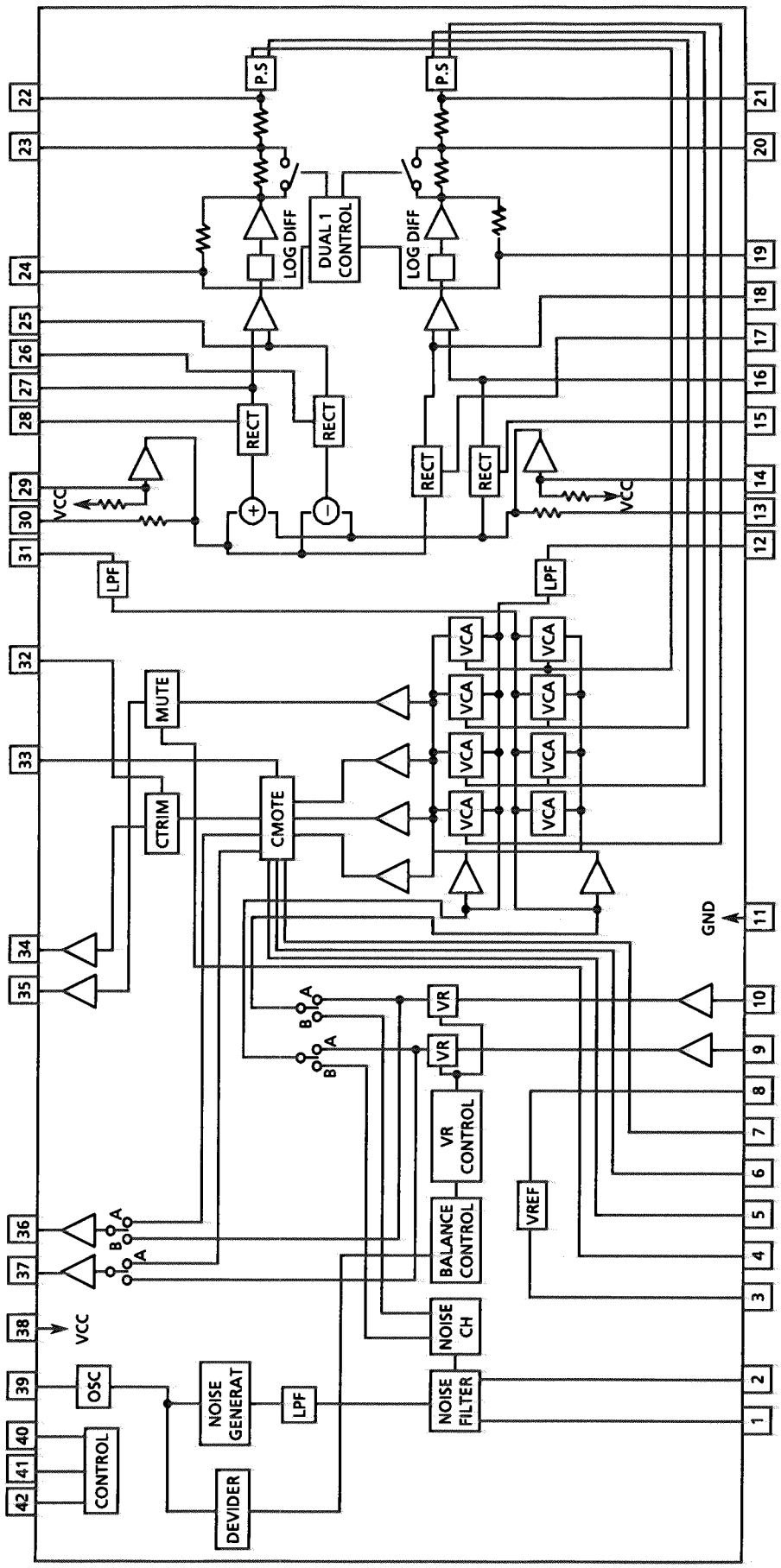
1. Terminal Layout



2. Pin Functions

Pin No	Symbol	I/O	Functions	Pin No	Symbol	I/O	Functions
1	NS-BPF1	--	Capacitor for spectrum filter in noise sequencer	22	VCS-1	--	Capacitor for time constant (in log differential area)
2	NS-BPF2	--	Capacitor for spectrum filter in noise sequencer	23	VCS-2	--	Capacitor for time constant (in log differential area)
3	VREF	--	Analog reference voltage	24	VCS-TH	--	Capacitor for time constant (in log differential area)
4	S-DC-OUT	--	Capacitor for DC-cut Sch	25	L+R RECT	--	Capacitor for Center channel detection
5	C-DC-OUT	--	Capacitor for DC-cut Cch	26	DC-CUT	--	Capacitor for DC-cut at detection circuit
6	L-DC-OUT	--	Capacitor for DC-cut Lch	27	L−R RECT	--	Capacitor for Surround channel detection
7	R-DC-OUT	--	Capacitor for DC-cut Rch	28	DC-CUT	--	Capacitor for DC-cut at detection circuit
8	VREF-BUFFER	--	VREF low impedance	29	R-BPF3	--	LPF,HPF for Right channel control circuit
9	L-IN	I	Left channel signal input	30	R-BPF2	--	LPF,HPF for Right channel control circuit
10	R-IN	I	Right channel signal input	31	R-BPF1	--	LPF,HPF for Right channel control circuit
11	GND	--	Ground	32	C-TRIM DC-CUT	--	Capacitor for DC-cut Center channel
12	L-BPF1	--	LPF,HPF for Lch control circuit	33	C-MODE-CAP	--	Capacitor for Center channel output low-pass filter
13	L-BPF2	--	LPF,HPF Left channel control circuit	34	C-OUT	O	Center signal output
14	L-BPF3	--	LPF,HPF Left channel control circuit	35	S-OUT	O	Surround signal output
15	DC-CUT	--	Capacitor for DC-cut at detection circuit	36	R-OUT	O	Right channel signal output
16	R RECT	--	Capacitor for Right channel detection	37	L-OUT	O	Left channel signal output
17	DC-CUT	--	Capacitor for DC-cut at detection circuit	38	VCC	--	power supply
18	L RECT	--	Capacitor for Left channel detection	39	OSC	--	Oscillation for noise sequencer and auto balance
19	VLR-TH	--	Capacitor for time constant (in log differential area)	40	STB	I	Strobe signal input
20	VLR-2	--	Capacitor for time constant (in log differential area)	41	DATA	I	Serial interface data input
21	VLR-1	--	Capacitor for time constant (in log differential area)	42	CLK	I	Serial interface clock

3. Block Diagram

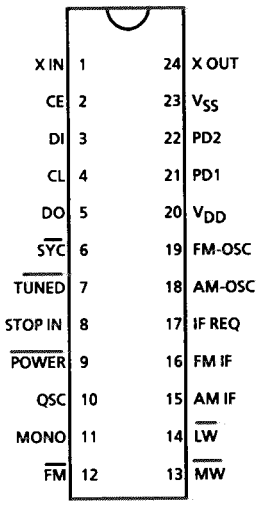


■ LC7218M (IC121) : PLL Synthesizer

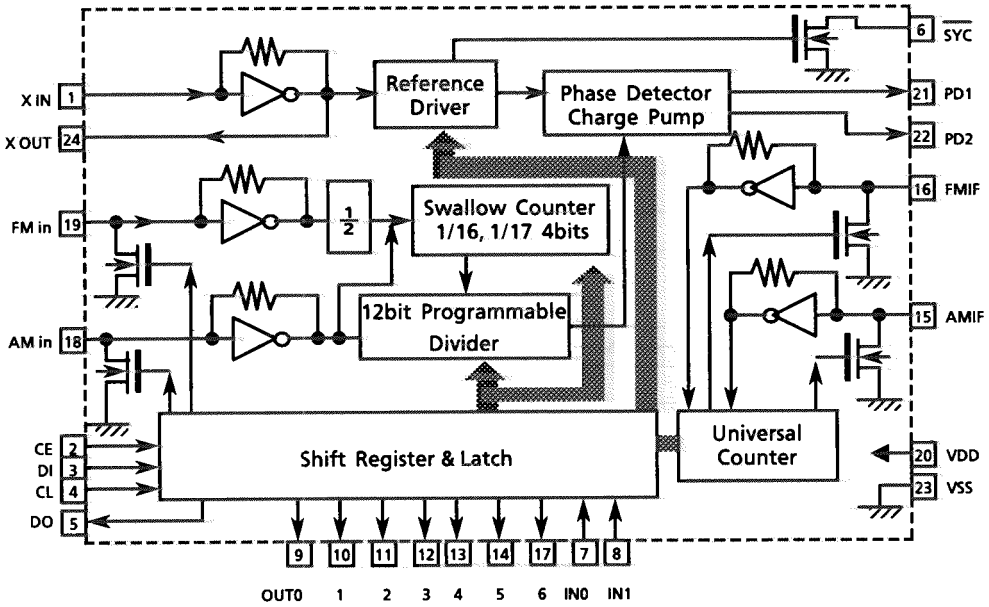
1. The main function descriptions

(1) It makes the local oscillation frequency by the control data from IC401.
(2) Decode the control signal and transmit the signal for receiving conditions.
(3) For the best tuning, count the internal-frequency and transmit the data to IC201.

2. Terminal Layout



3. Block Diagram

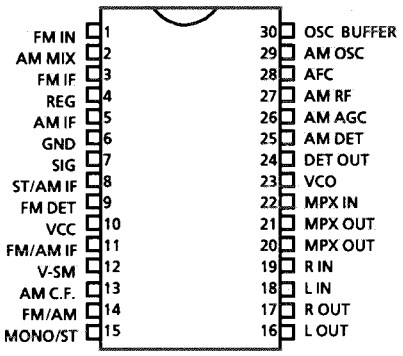


4. Pin Functions

Pin No.	Symbol	I/O	Functions
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC401).
4	CL	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218JM to the controller which is synchronized with CL.
6	SYC	—	Not used.
7	TUNED	I	Receive the tuned signal from IC102 (LA1836M).
8	STOP IN	—	Connected to GND
9	POWER	—	Not used.
10	QSC	—	Not used.
11	MONO	O	It is "H" on FM-monaural, "L" on FM-Stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on MW mode.
14	LW	O	It is "L" on LW mode.
15	AM-IF	I	Universal counter input for AM-IF from IC102 (LA1836M).
16	FM-IF	I	Universal counter input for FM-IF from IC102 (LA1836M).
17	IF REQ	O	Output the "IF-signal request" to IC102 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V_{DD}	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	Vss	—	Connected to GND

■ LA1836M (IC102) : FM AM IF AMP & detector, FM MPX DECORDER

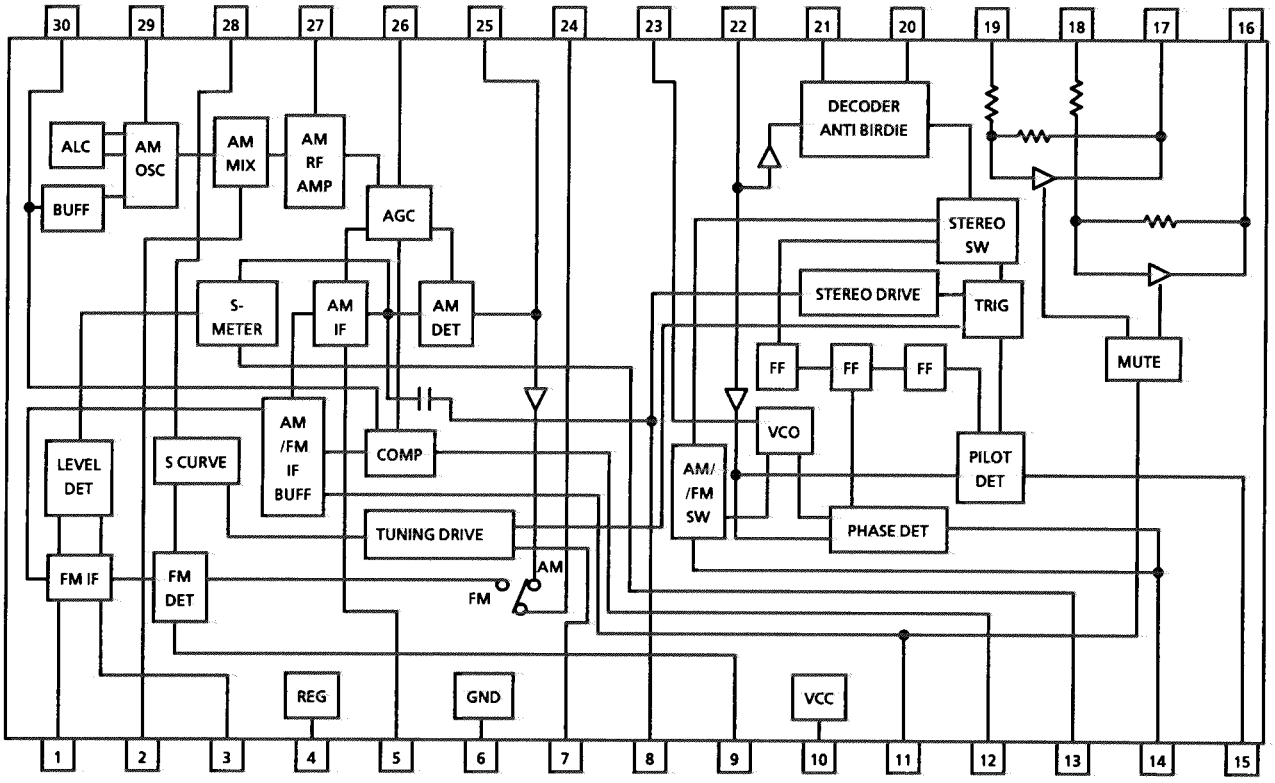
1. Terminal Layout



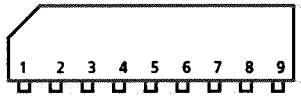
3. Pin Function

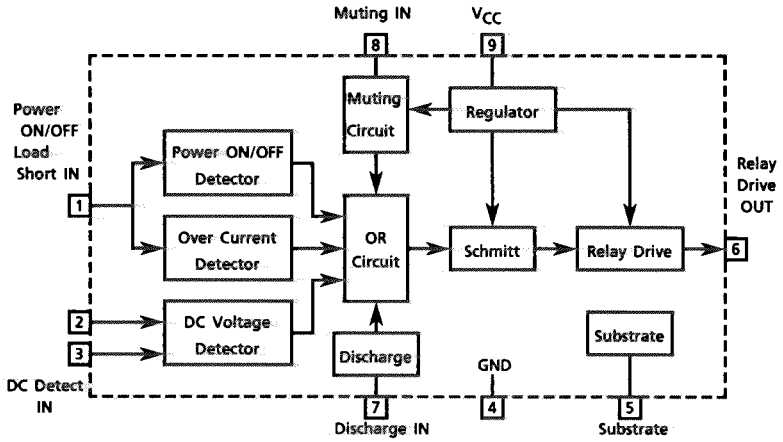
Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF Signal.
2	AM MIX	O	This is an output terminal for AM mixer.
3	FM IF	I	Bypass of FM IF
4	REG	—	Register value between pin4 and pin28 desides the frequency width of the input signal.
5	AM IF	I	Input of AM IF Signal.
6	GND	—	This is the device ground terminal.
7	SIG	O	When the set is tunning, this terminal becomes "L".
8	ST/AM IF	O	Stereo indicator output. Stereo : "L", Mono : "H"
9	FM DET	—	FM detect transformer.
10	VCC	—	This is the power supply terminal.
11	FM/AM IF //MUTE	O/I	When the signal of IF REQ of IC121(LC7218JM) appear, the signal of FM/AM IF output. //Muting control input.
12	VSM	O	S Meter output and adjust AM SD sensitivity.
13	AM C.F.	O	This is a terminal of AM ceramic filter.
14	FM/AM	I	Change over the FM / AM input. "H" : FM, "L" : AM
15	MONO/ST	O	Stereo : "H", Mono : "L"
16	L OUT	O	Left channel signal output.
17	R OUT	O	Right channel signal output
18	L IN	I	Input terminal of the Left channel post AMP.
19	R IN	I	Input terminal of the Right channel post AMP.
20	MPX L OUT	O	Mpx Left channel signal output.
21	MPX R OUT	O	Mpx Right channel signal output.
22	MPX IN	I	Mpx input terminal.
23	VCO	I	Voltage controlled oscillator terminal.
24	DET OUT	O	AM/FM detection output.
25	AM DET	—	AM low cut adjustment.
26	AM AGC	I	This is an AGC voltage input terminal for AM.
27	AM RF	I	This is an input terminal for AM RF signal.
28	AFC	—	This is an output terminal of voltage for FM-AFC.
29	AM OSC	—	This is a terminal of AM Local oscillation circuit.
30	OSC BUFFER	O	AM Local oscillation Signal output.

2. Block Diagram

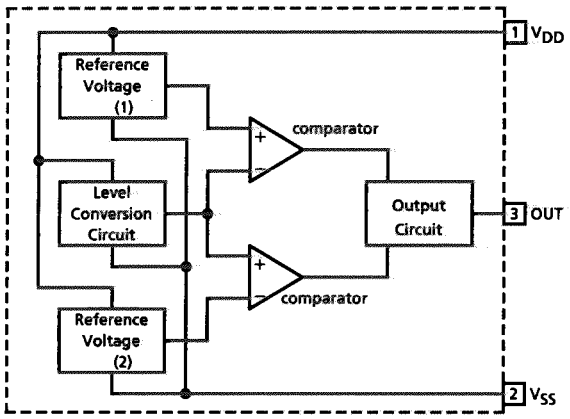


■ TA7317P (IC901) : Protector



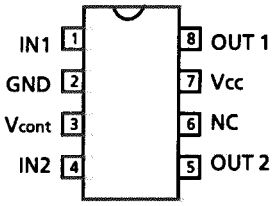


■ MN1281(P.Q) (IC403) : Reset IC



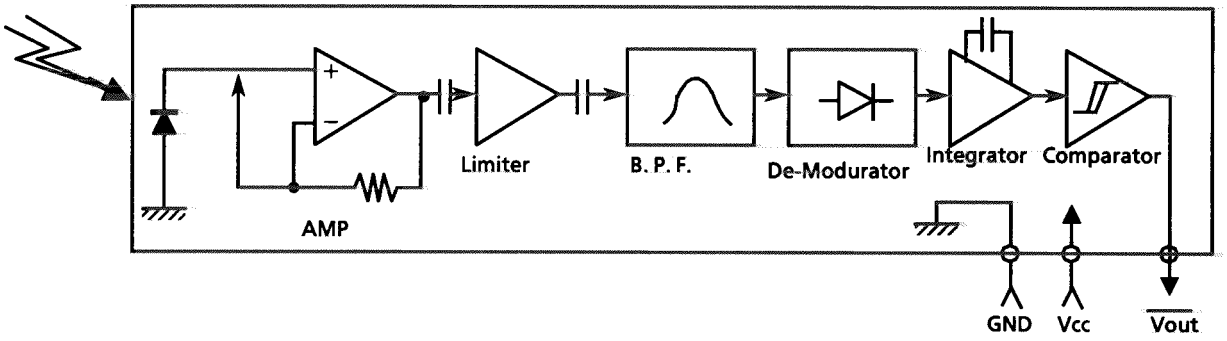
Pin No.	Pin Name	Functions
1	V_{DD}	Power supply
2	V_{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

■ LB1639-CV (IC511) : Motor Driver

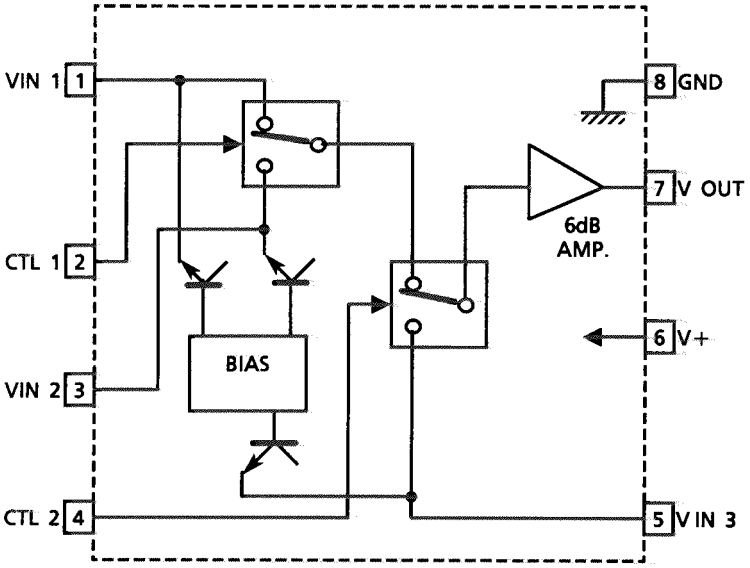


IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ SPS-420-1 (IC402) : Remote Control Module IC



■ NJM2246D (IC661) : Video Switch

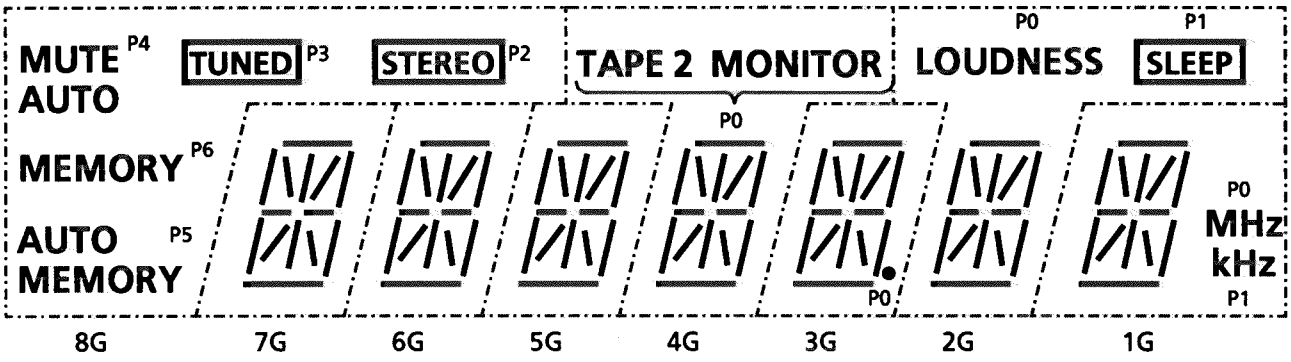


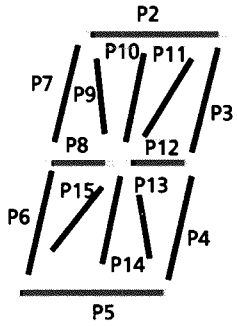
Control Signal—OutputSignal

CTL 1	CTL 2	Output
L	L	V IN 1
H	L	V IN 2
L / H	H	V IN 3

Internal Connections of the FL Display

■ELU0001-144 : FL401





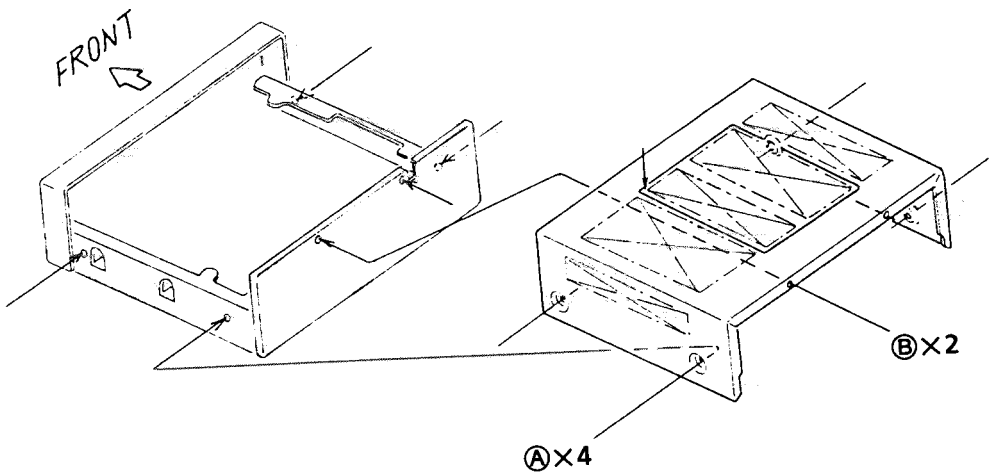
Pin Connection

PIN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
ELECTRODE	F1	F1	F1	NP	NP	NP	NP	NP	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6		
PIN NUMBER			19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
ELECTRODE			P5	P4	P3	P2	P1	P0	8G	7G	6G	5G	4G	3G	2G	1G	NP	F2	F2	F2

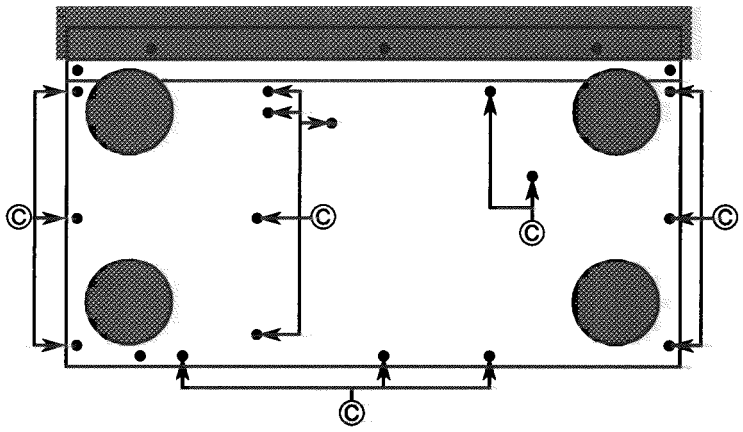
Note F : Filament, G : Grid, P : Element, NP : No Pin, NC : No Connection

Disassembly Procedures

(1) Removing the top cover
1. Remove 4 screws Ⓐ fastening both sides of top cover, and 2 screws Ⓑ fastening the rear side.
2. Remove the top cover.

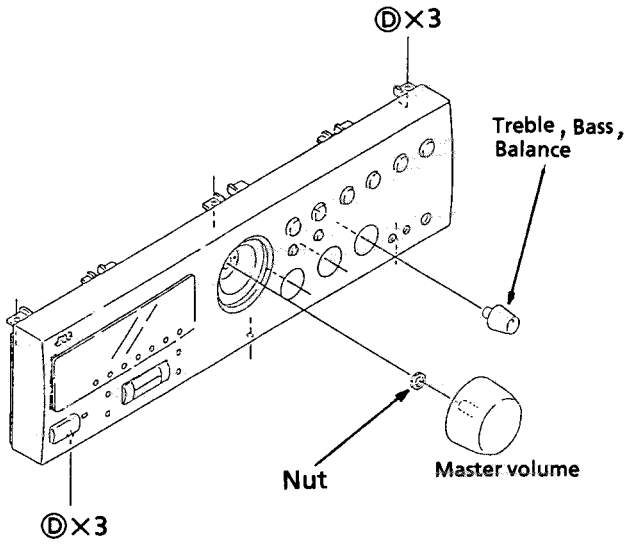


(2) Removing the Bottom Cover
1. Remove 16 screws Ⓒ.
2. Remove the bottom cover.

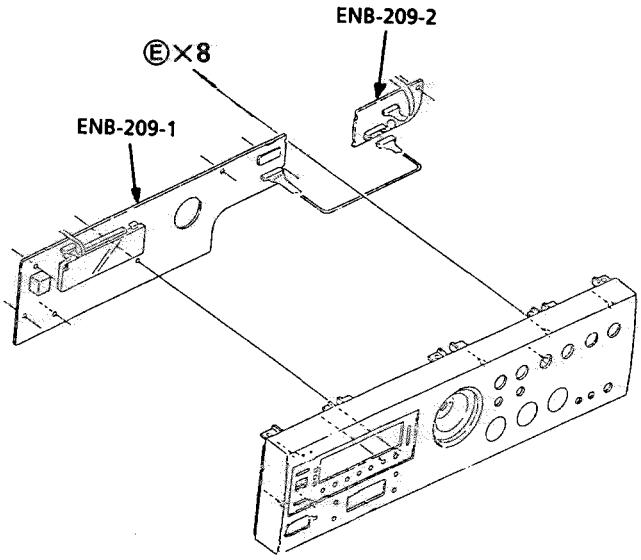


Ⓐ .. E61660-004 Ⓑ ... E73273-003 Ⓒ ... SBSG3008CC

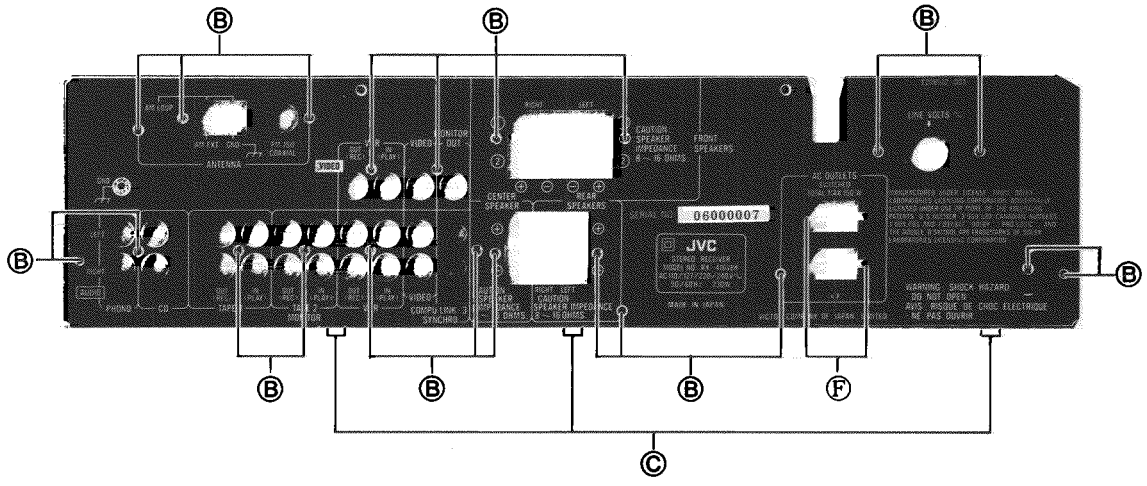
(3) Removing the Front Panel Assembly
1. Remove 3 screws Ⓓ fastening top of the front panel, and 3 screws Ⓓ fastening bottom of it.
2. Remove the Master volume knob,Treble knob,Bass knob and Balance knob.
3. Remove the nut fastening the Master volume.
4. Remove the front panel disconnecting some wires. (CN881,CN442,J103)



(4) Removing the Front P.C. Board
1. Removing the front panel assembly.
2. Remove 8 screws Ⓔ.
3. Remove the front P.C. Board.

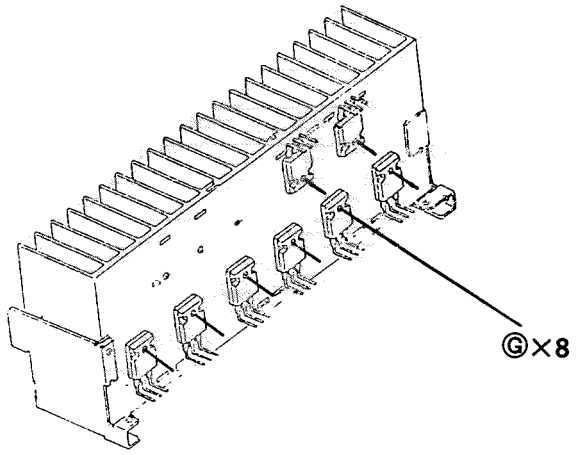


(5) Removing the Rear Panel
1. Remove 23 screws Ⓑ and Ⓕ.
2. Remove 3 screws Ⓒ fastening bottom sides of rear panel.
3. Take it out.



Ⓑ E73273-003 Ⓒ SBSG3008CC Ⓓ SDSG3008M Ⓔ SDSF2608Z Ⓕ SDSG3008CC

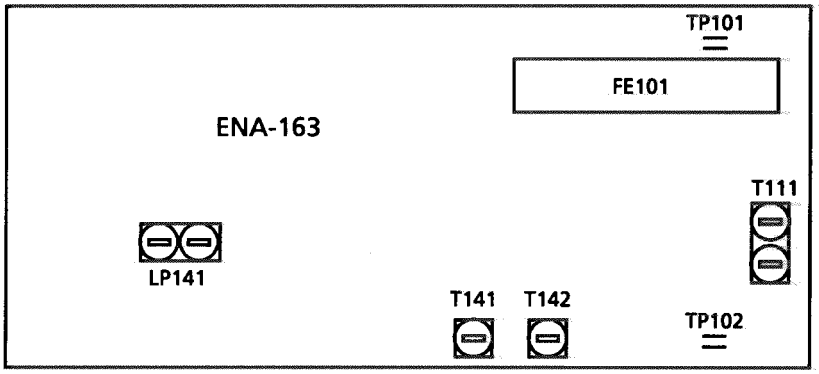
(6) Removing the Power Transistor
1. Remove the top cover and bottom cover.
2. Unsolder the broken transistor.
3. Remove the some screws Ⓖ fastening it.
4. Remove it.



Ⓖ .. E73525-003

ADJUSTMENT PROCEDURES

■ Tuner section



Tuning range

Area	Range		
	LW (kHz)	MW (kHz)	FM (MHz)
Continental Europe, the U.K	144~288	522~1629	87.5MHz~108MHz
Australia	—	522~1629	
Universal type(AM Channel space 9kHz)	—	531~1602	
Universal type(AM Channel space 10kHz)	—	530~1600	

(1) Tuning Voltage
Confirm the voltages in the table at TP101.

FM Tuning voltage (Unit : V)

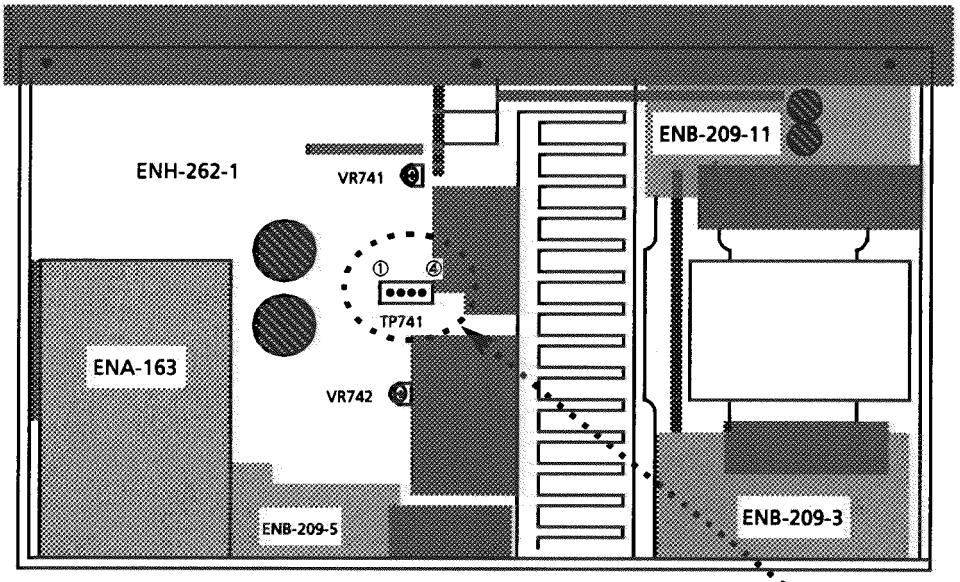
Area	Frequency	
	87.5MHz	108MHz
the U.K., Continental Europe, Australia, Universal	1.6±1.0	8.0±2.0

AM Tuning voltage (Unit : V)

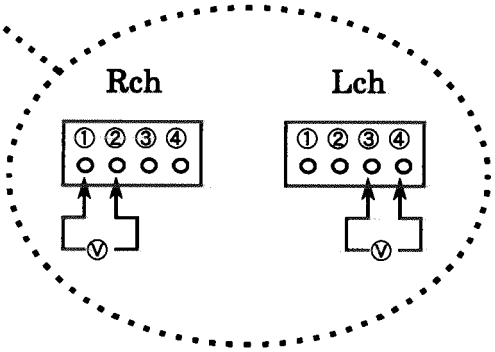
Area	Frequency (MW)						Frequency (LW)	
	522KHz	530KHz	531KHz	1600KHz	1602KHz	1629KHz	144kHz	288kHz
the U.K., Continental Europe	0.5 <1.0	—	—	—	—	7.5 <8.5	0.5 <1.0	5.0 <7.5
Australia	0.5 <1.0	—	—	—	—	7.5 <8.5	—	—
Universal (Chanel space9kHz)	—	—	0.8 <1.0	—	7.2 <7.9	—	—	—
Universal (Chanel space10kHz)	—	0.8 <1.0	—	7.2 <7.9	—	—	—	—

(2) FM Center meter
Receive a broadcast by using the function of 'AUTO STOP'.
Adjust T141 (Detector coil) so taht the voltage at TP102 becomes 0±1.5mV.

■ Power Amplifier section

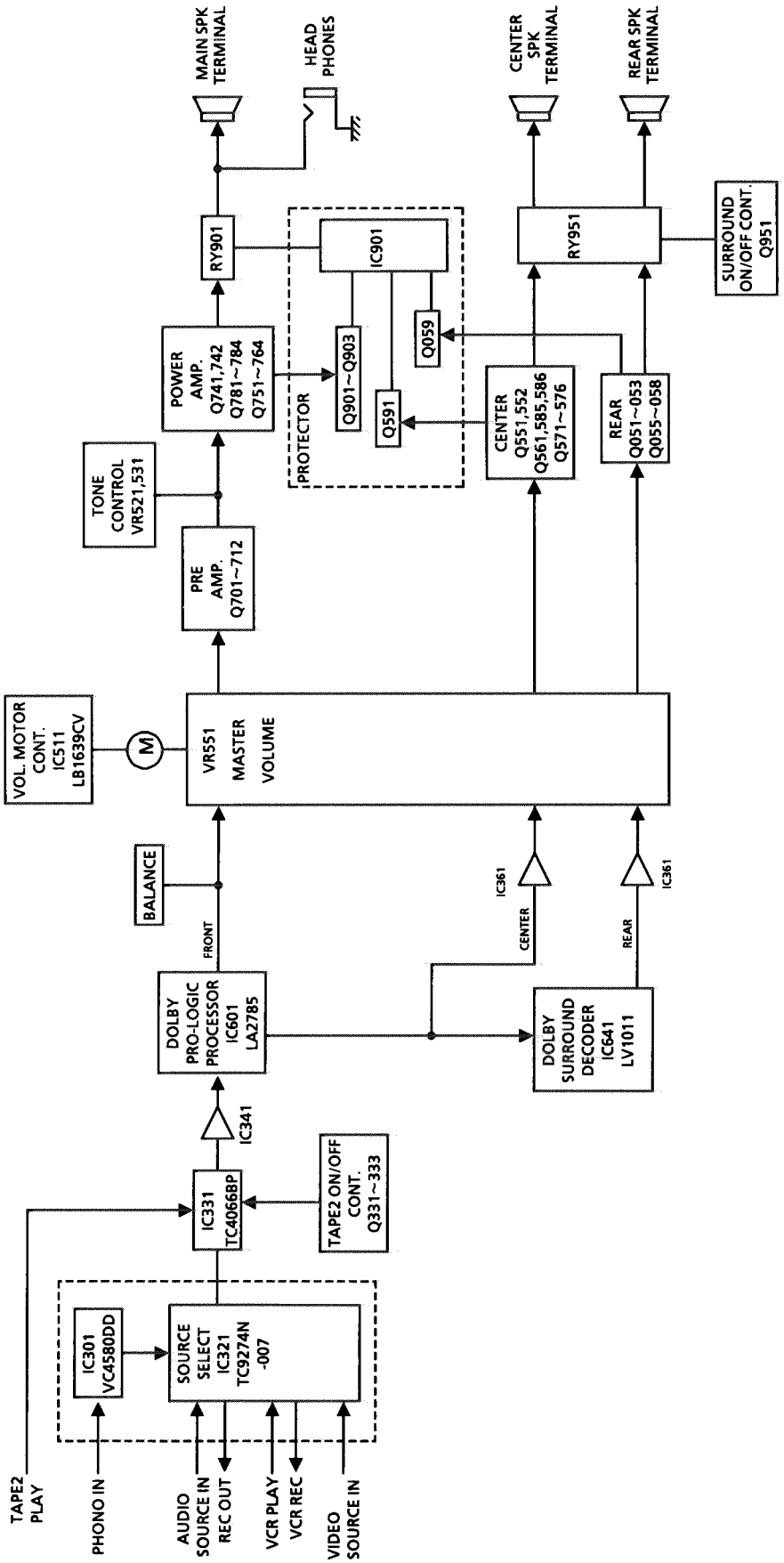


■ Idling current
(1) Set the volume control to minimum during this adjustment.
(2) Turn VR741 and VR742 fully counterclockwies to warm up befor adjustment.
If the heatsink is already warm from previous use the correct adjustment can not be made.
(3) For L-ch, connect a DC voltmeter between TP741's pinl and pin2.
And, connect it between pin3 and pin4 for R-ch.
(4) Appox. 30minutes later after power on, djust VR741 for L-ch , or VR742 for R-ch so that the DC voltmeter's value has 1mV~10mV.

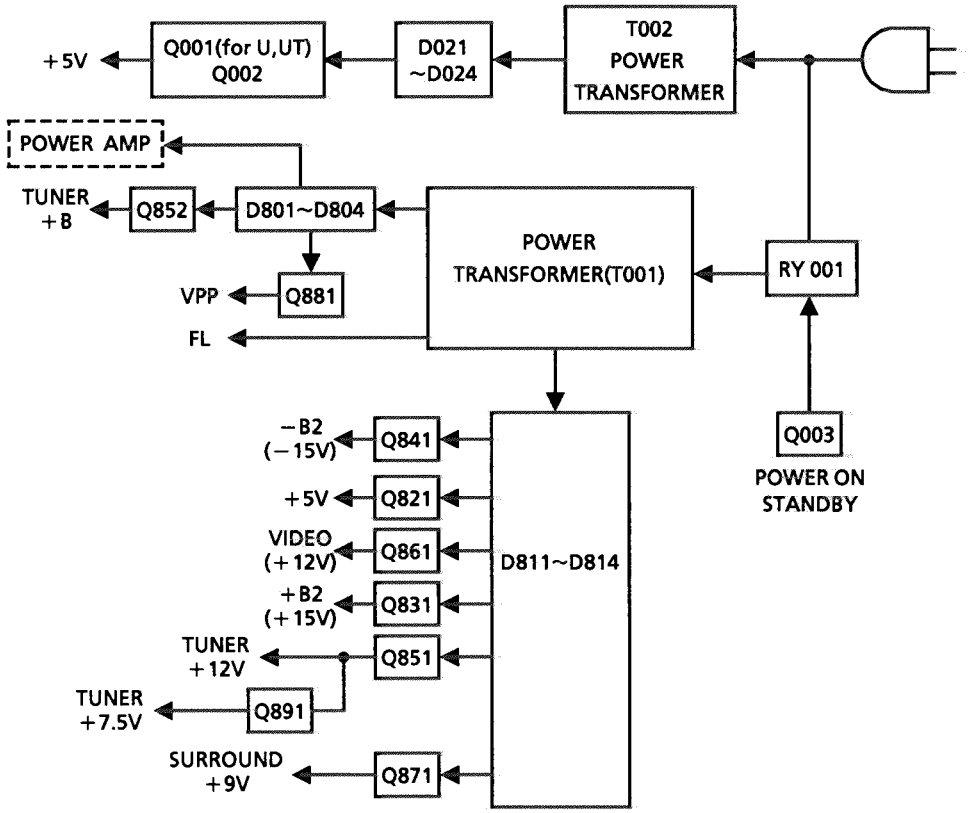


Block Diagrams

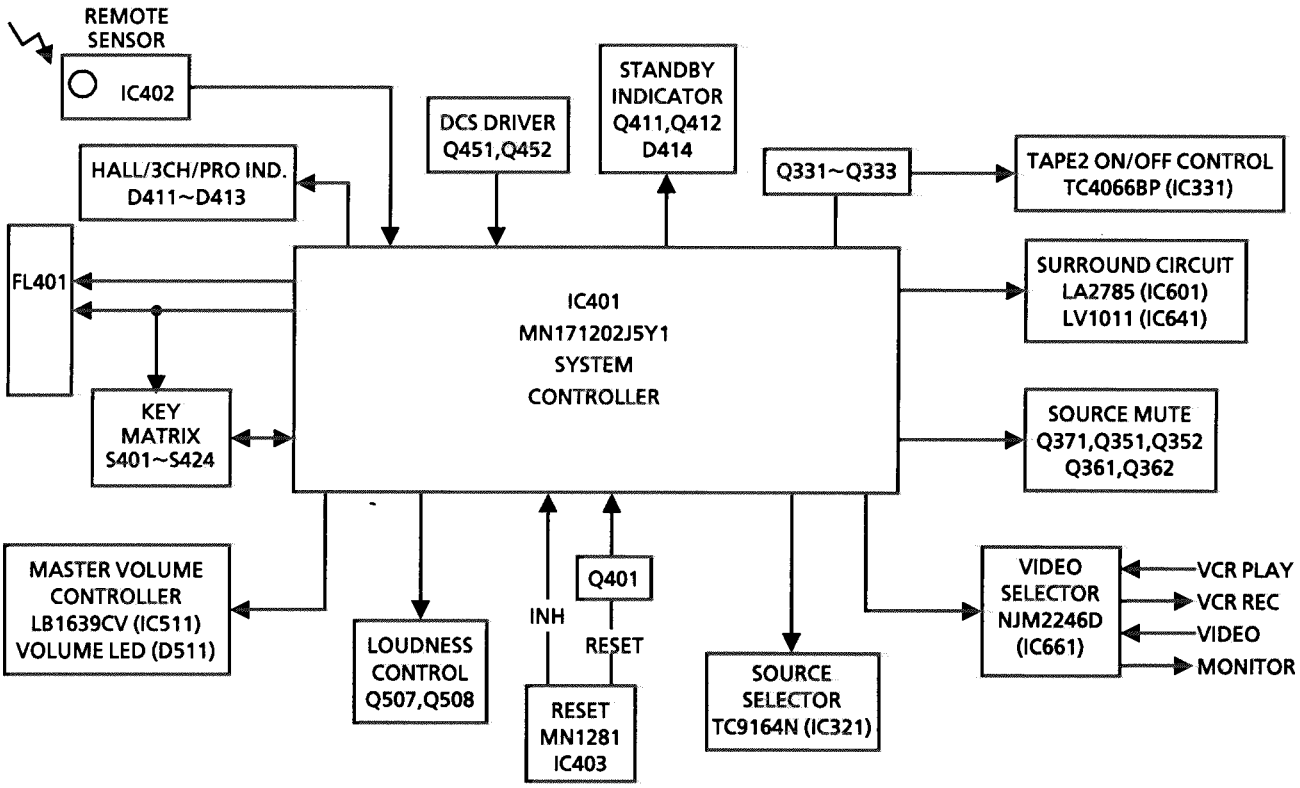
■ Signal Flow Section



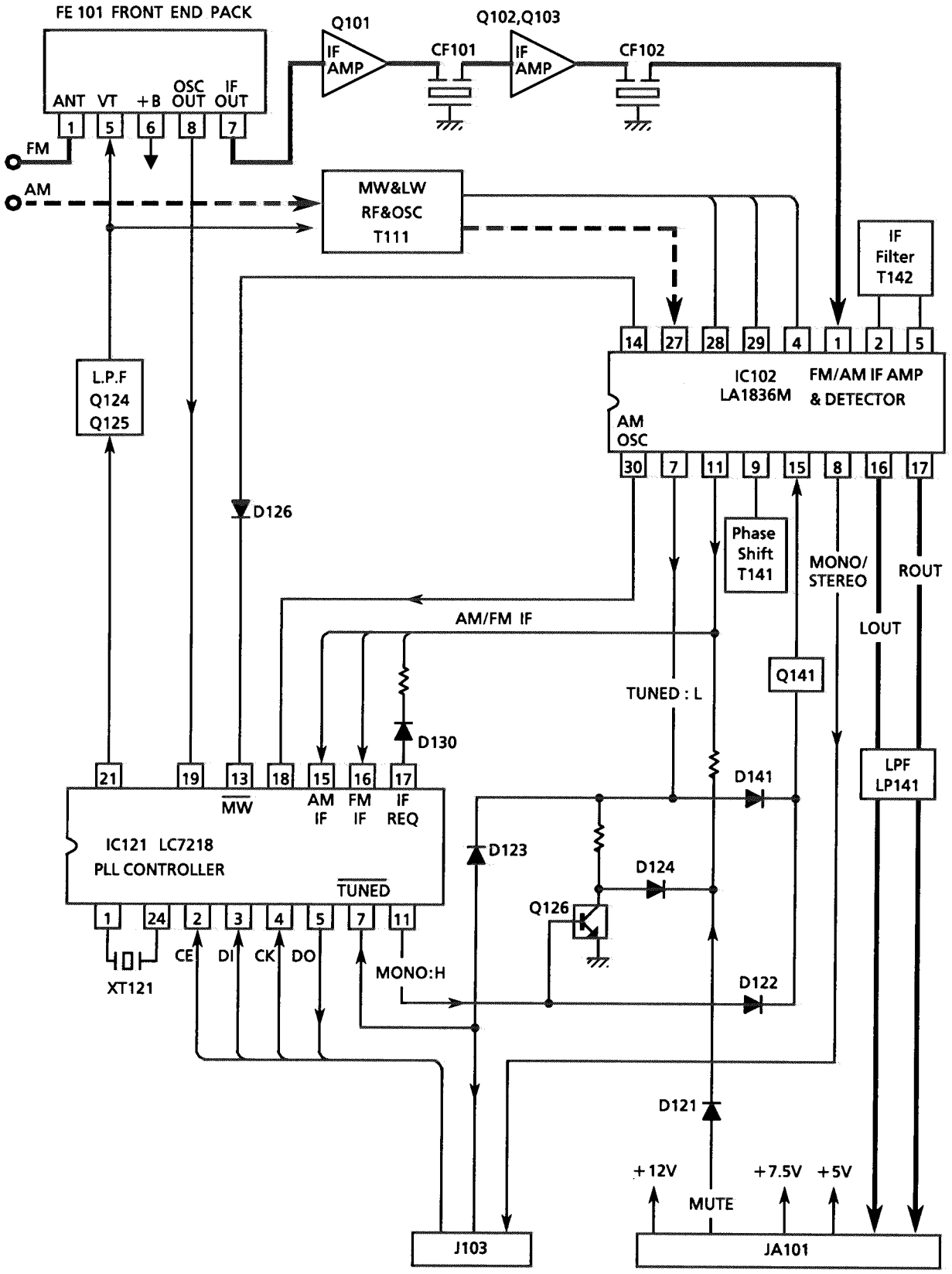
■ Power Supply Section



■ Control Section

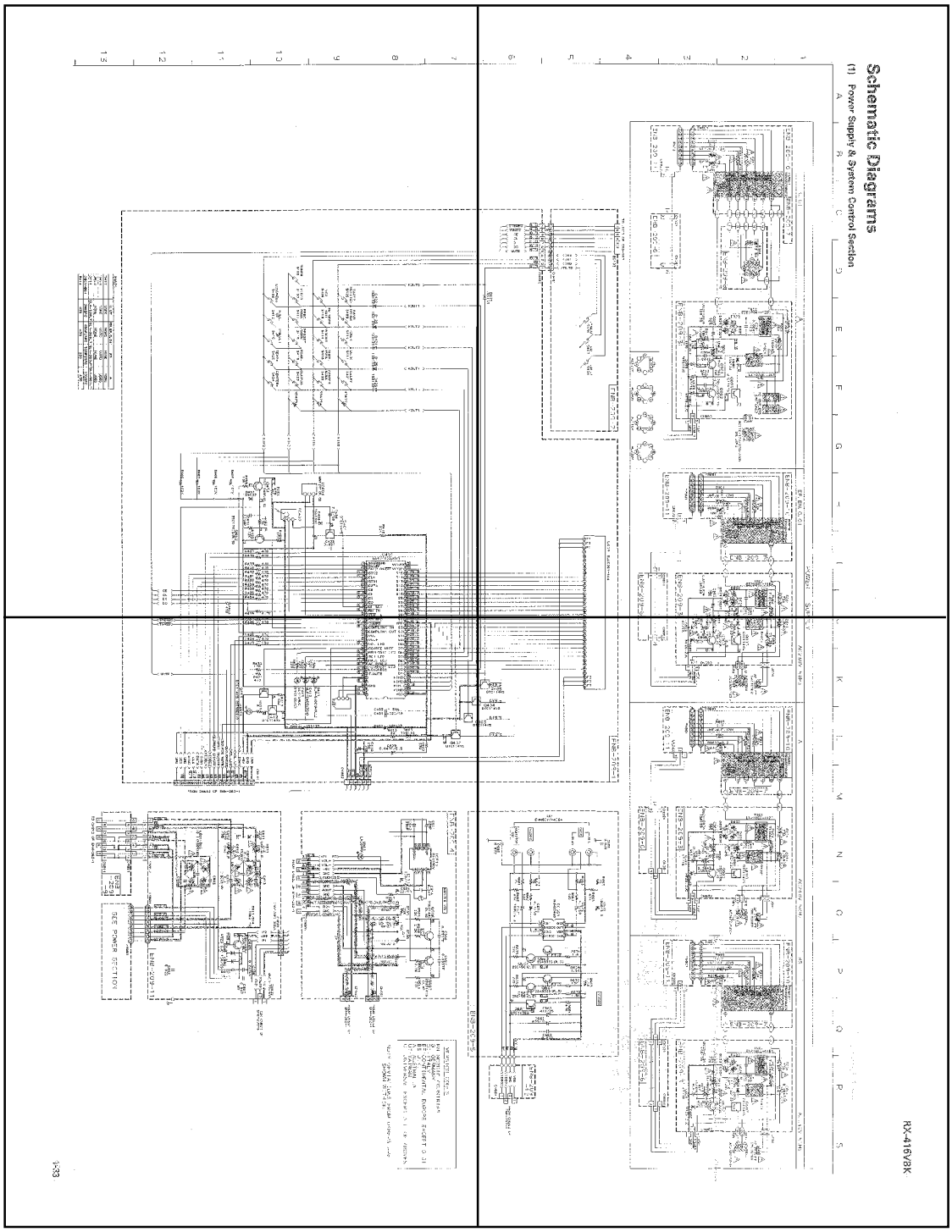


■ Tuner Section

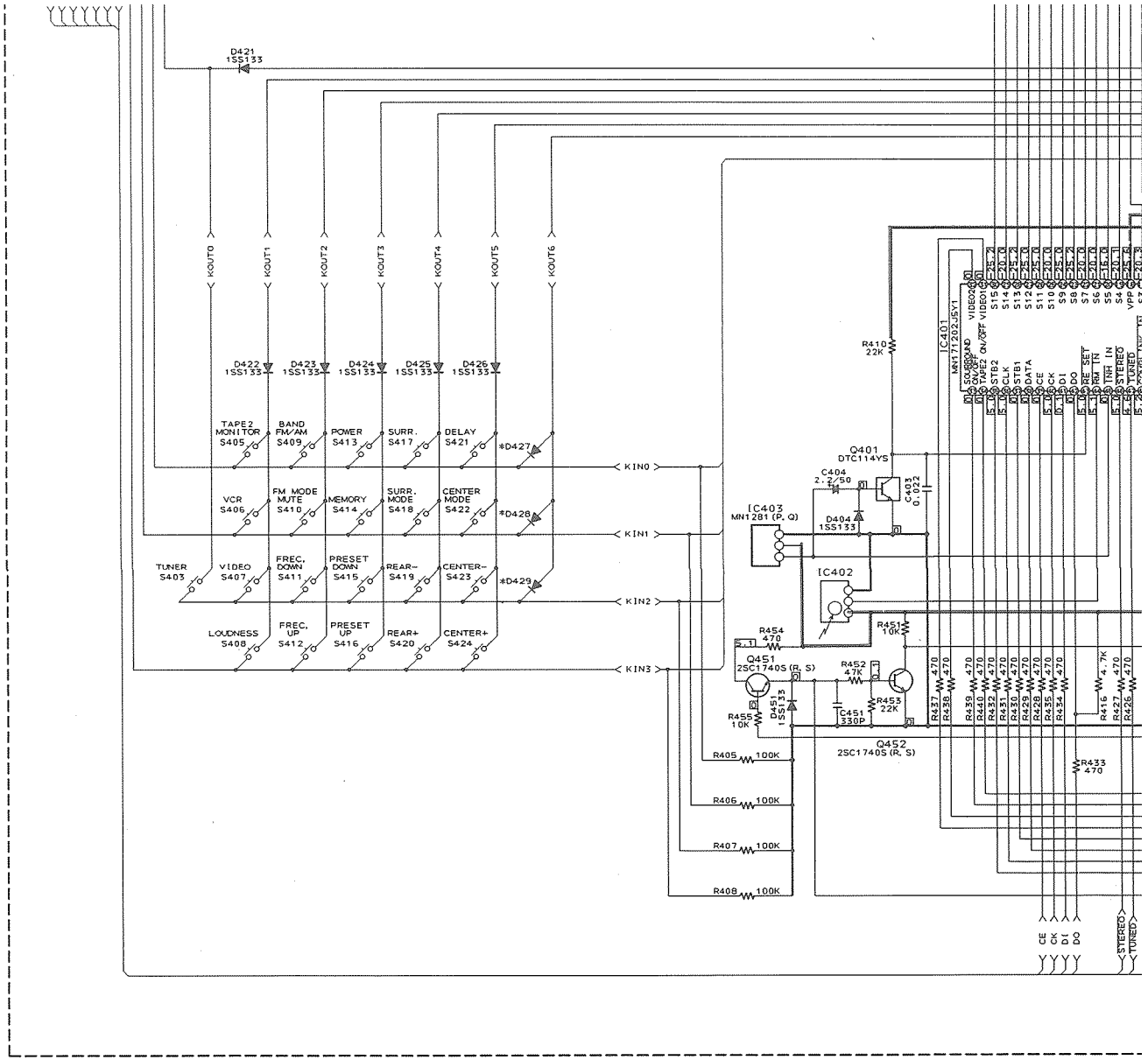


— MEMO —

P1-33-a P1-33-b



P1-33-c P1-33-d

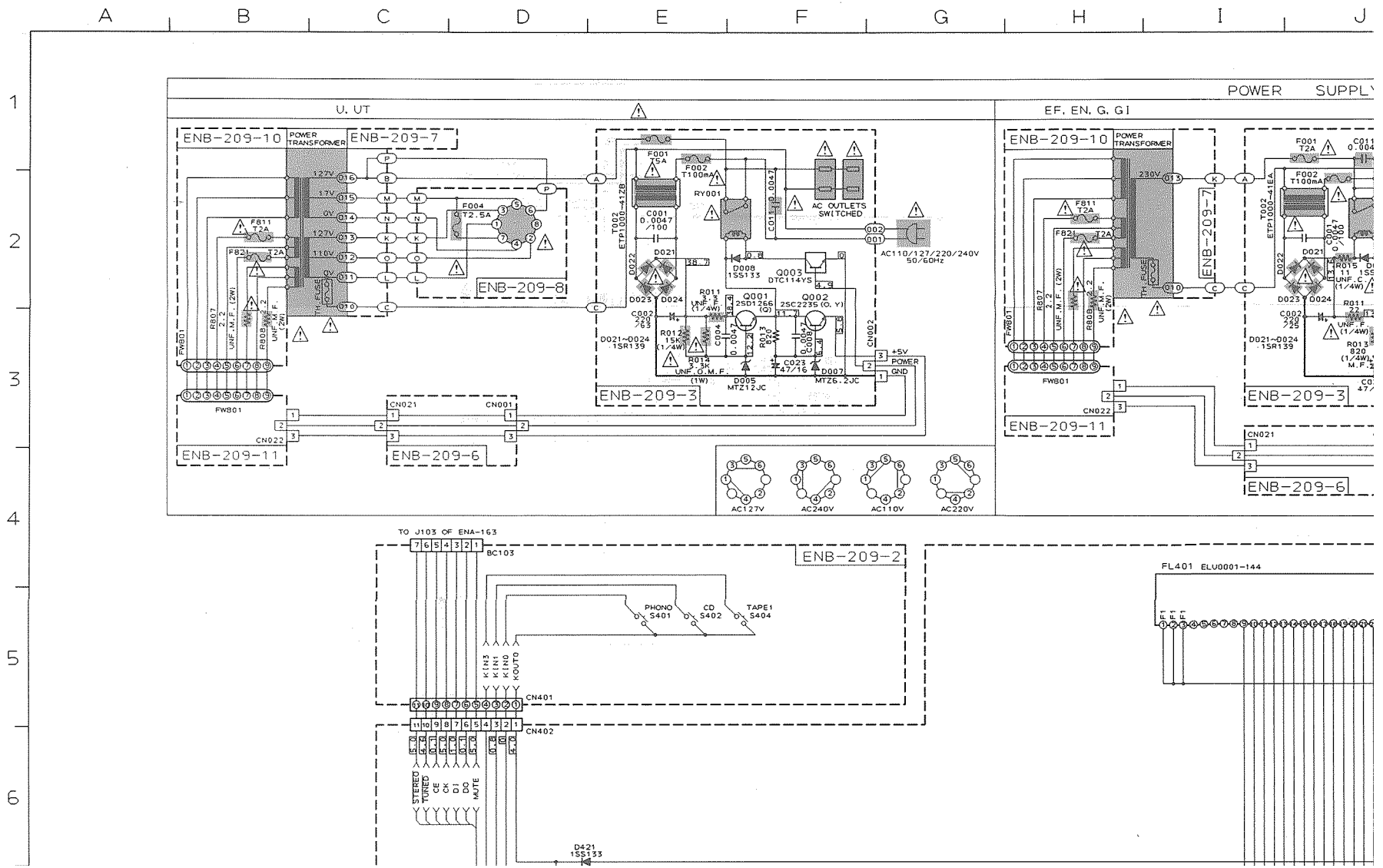


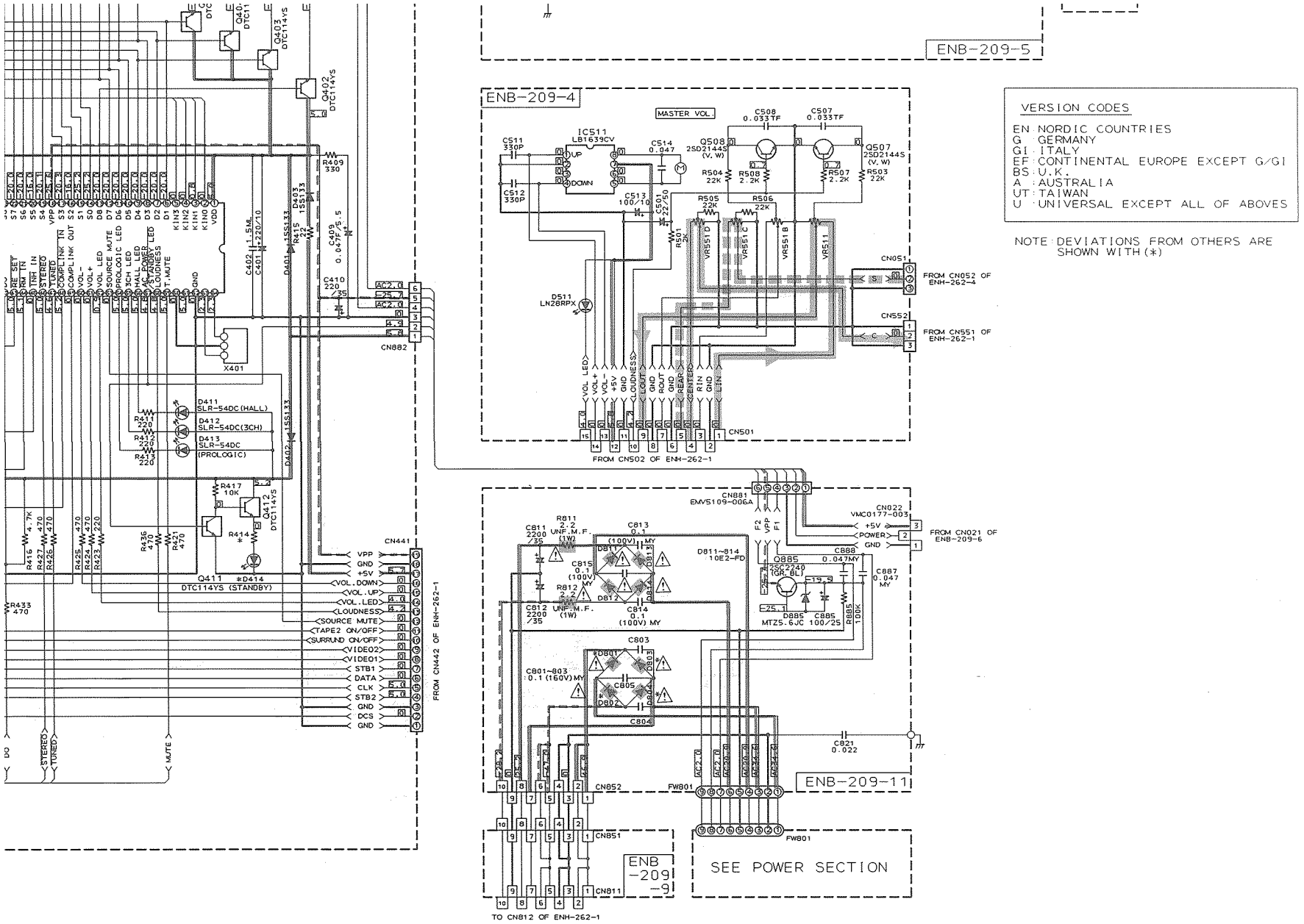
*MARK

	U, UT	EN, EF, G, GI	BS	A
D427	USED	NONE	NONE	NONE
D428	NONE	USED	USED	USED
D429	NONE	NONE	NONE	USED
D414	SLA-380LT	SLA-380LT	SLA-380JT	SLA-380LT
D801-804	30D2FC	30DF2SFC	30DF2SFC	30D2FC
R414	430	430	220	430

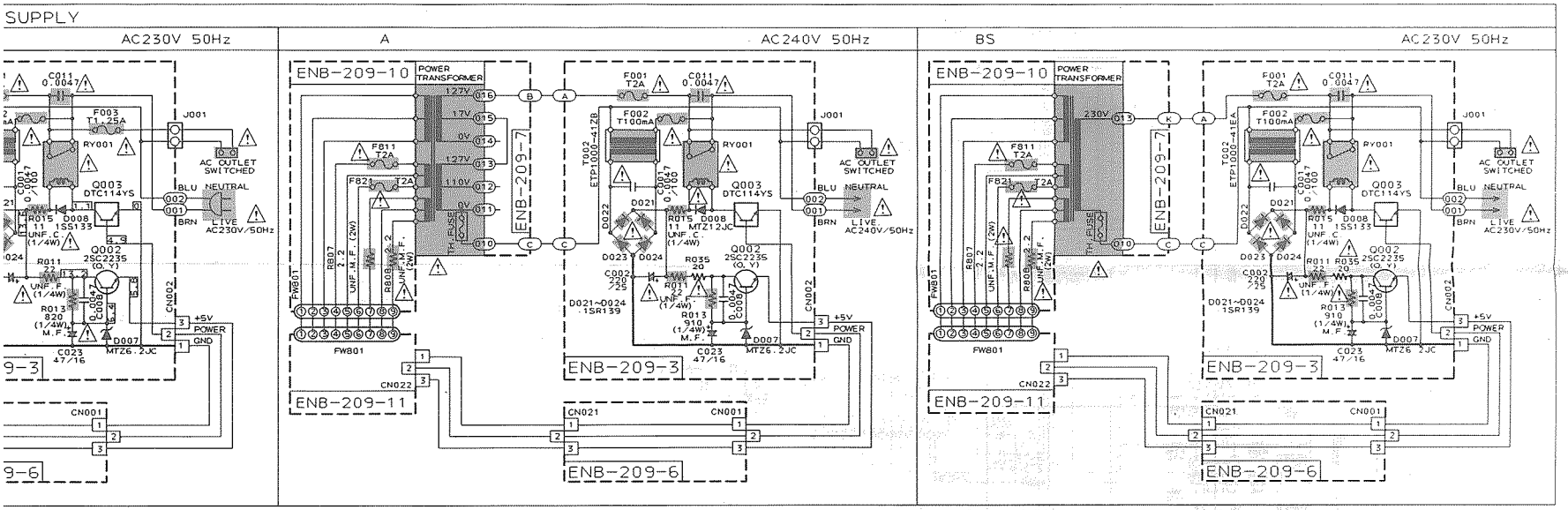
Schematic Diagrams

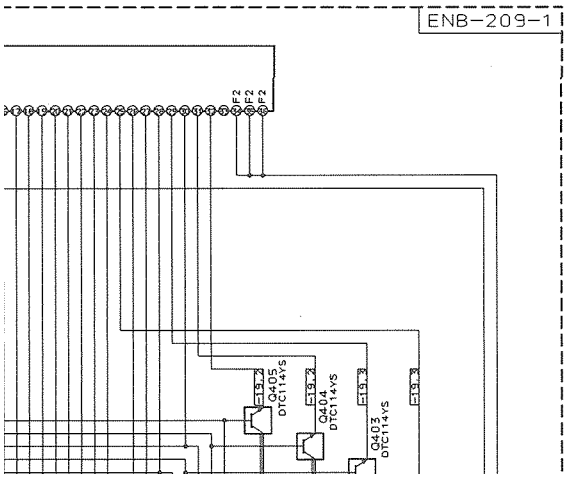
(1) Power Supply & System Control Section

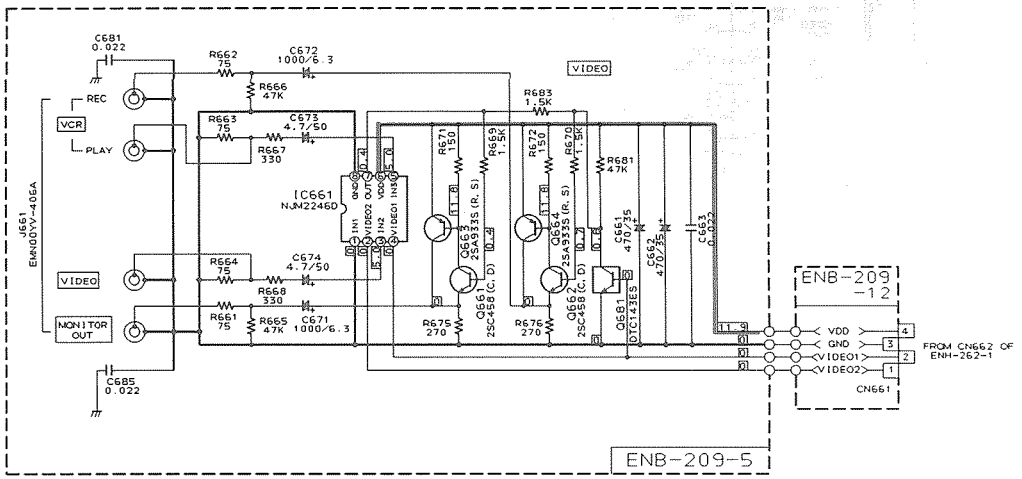



ENB-209-5
ENB-209-4
MASTER VOL.
IC511
LB1639CV
Q508
2SD2144S
(V, W)
Q507
2SD2144S
(V, W)
C508
0.033TF
C507
0.033TF
C511
330P
C512
330P
C513
100/10
C514
0.047
R504
22K
R508
2.2K
R507
2.2K
R503
22K
R505
22K
R506
22K
R501
2K
C501
22/50
VR511
VR518
VR517
VR516
D511
LN28RPX
CN051
CN552
FROM CN052 OF ENH-262-4
FROM CN551 OF ENH-262-1
CN501
FROM CN502 OF ENH-262-1
VERSION CODES
EN : NORDIC COUNTRIES
G : GERMANY
GI : ITALY
EF : CONTINENTAL EUROPE EXCEPT G/GI
BS : U.K.
A : AUSTRALIA
UT : TAIWAN
U : UNIVERSAL EXCEPT ALL OF ABOVES
NOTE : DEVIATIONS FROM OTHERS ARE SHOWN WITH (*)
CN882
X401
D411
SLR-54DC(HALL)
D412
SLR-54DC(3CH)
D413
SLR-54DC
(PROLOGIC)
R409
330
C409
0.047F/5.5
C410
220
/35
C402
1.5M
C401
220/10
D401~1SS133
D402~1SS133
D403
1SS133
R415
1M
Q402
DTC144VS
Q403
DTC114YS
Q410
DTC114YS
Q411
DTC114YS (STANDBY)
*D414
Q412
DTC114YS
R417
10K
R414
*
R411
220
R412
220
R413
220
R416
4.7K
R427
470
R426
470
R425
470
R424
470
R423
220
R436
470
R421
470
R433
470
CN441
VPP
GND
+5V
<VOL.DOWN>
<VOL.UP>
<VOL.LED>
<LOUDNESS>
<SOURCE MUTE>
<TAPE2 ON/OFF>
<SURROUND ON/OFF>
<VIDEO2>
<VIDEO1>
STB1
DATA
CLK
STB2
GND
DCS
GND
FROM CN442 OF ENH-262-1
CN881
EMV5109-006A
CN022
VMC0177-003
+5V
POWER
GND
FROM CN021 OF ENB-209-6
C811
2200
/35
UNF.M.F.
(1W)
R811
2.2
C813
0.1
(100V) MY
C815
0.1
(100V) MY
R812
2.2
UNF.M.F.
(1W)
C812
2200
/35
C814
0.1
(100V) MY
D811~814
10E2-FD
C888
0.047MY
Q885
2SD2210
(GR-BL)
C887
0.047
MY
D885
MTZ5.6JC
C885
100/25
R885
100K
C803
C801~803
0.1 (160V) MY
C805
C804
C821
0.022
CN852
FW801
ENB-209-11
CN851
CN811
ENB
-209
-9
TO CN812 OF ENH-262-1
FW801
SEE POWER SECTION

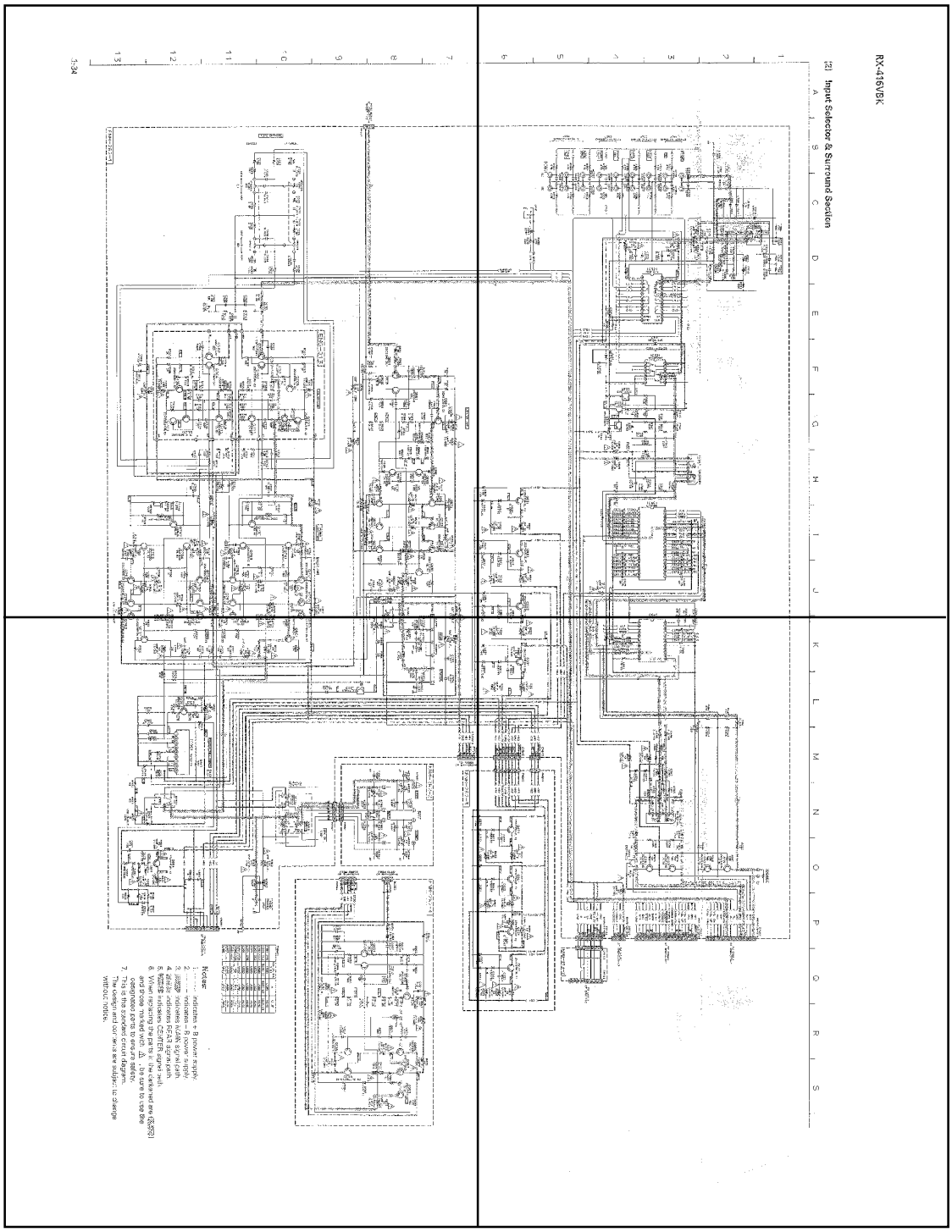
J K L M N O P Q R S


SUPPLY
AC230V 50Hz
A
AC240V 50Hz
B
AC230V 50Hz
ENB-209-10
POWER TRANSFORMER
ENB-209-7
ENB-209-3
ENB-209-11
ENB-209-6
FW801
CN022
CN021
CN001
CN002
J001
AC OUTLET SWITCHED
BLU NEUTRAL
BRN LIVE
AC230V/50Hz
AC240V/50Hz
POWER
GND
+5V

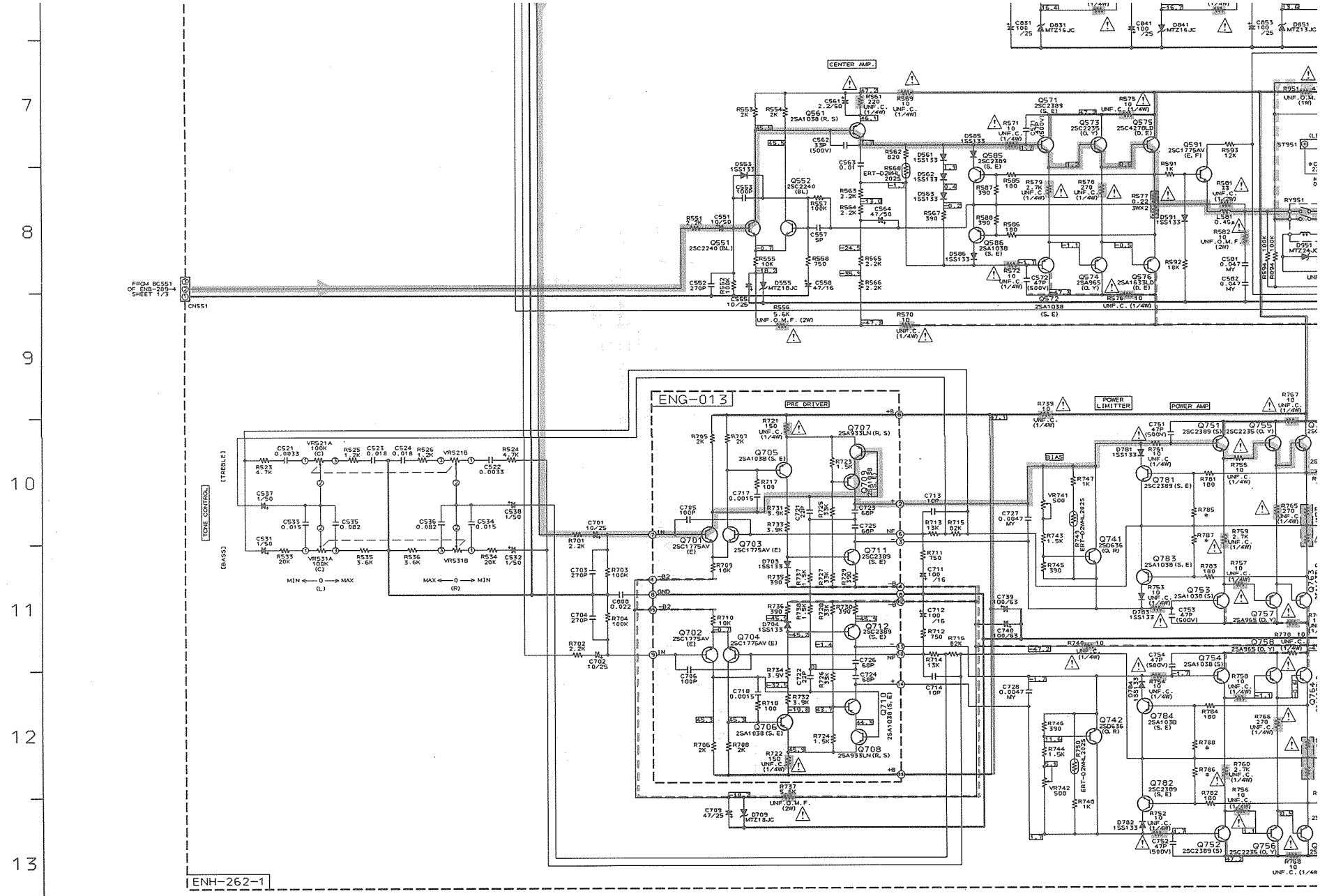

ENB-209-1
Q405 DTC114YS
Q404 DTC114YS
Q403 DTC114YS


ENB-209-5
IC661 NJM2246D
J661 EKN10YY-406A
REC
VCR
PLAY
VIDEO
MONITOR OUT
ENB-209-12
VDD
GND
VIDEO1
VIDEO2
CN661
FROM CN662 OF ENH-262-1

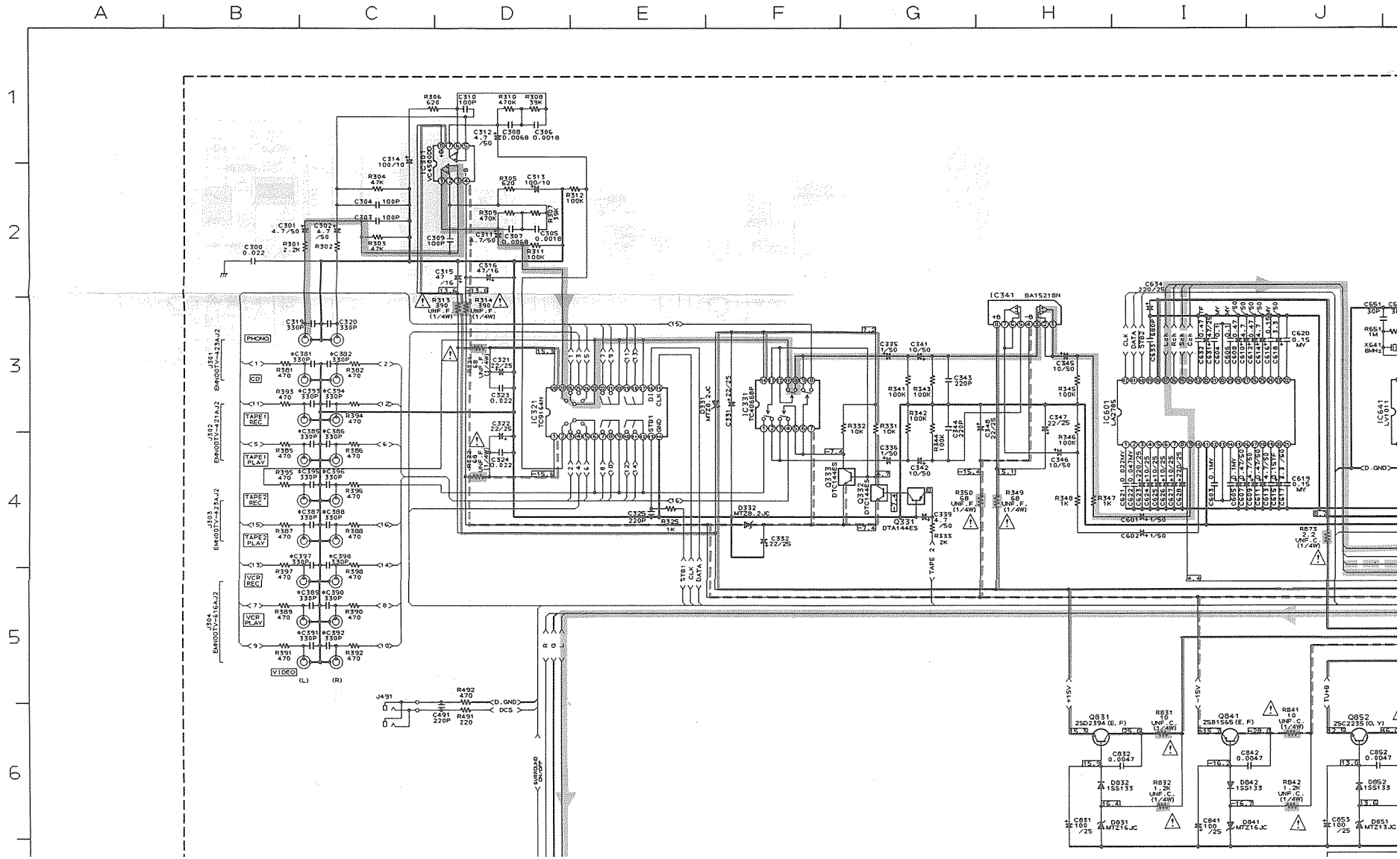
P1-34-a P1-34-b

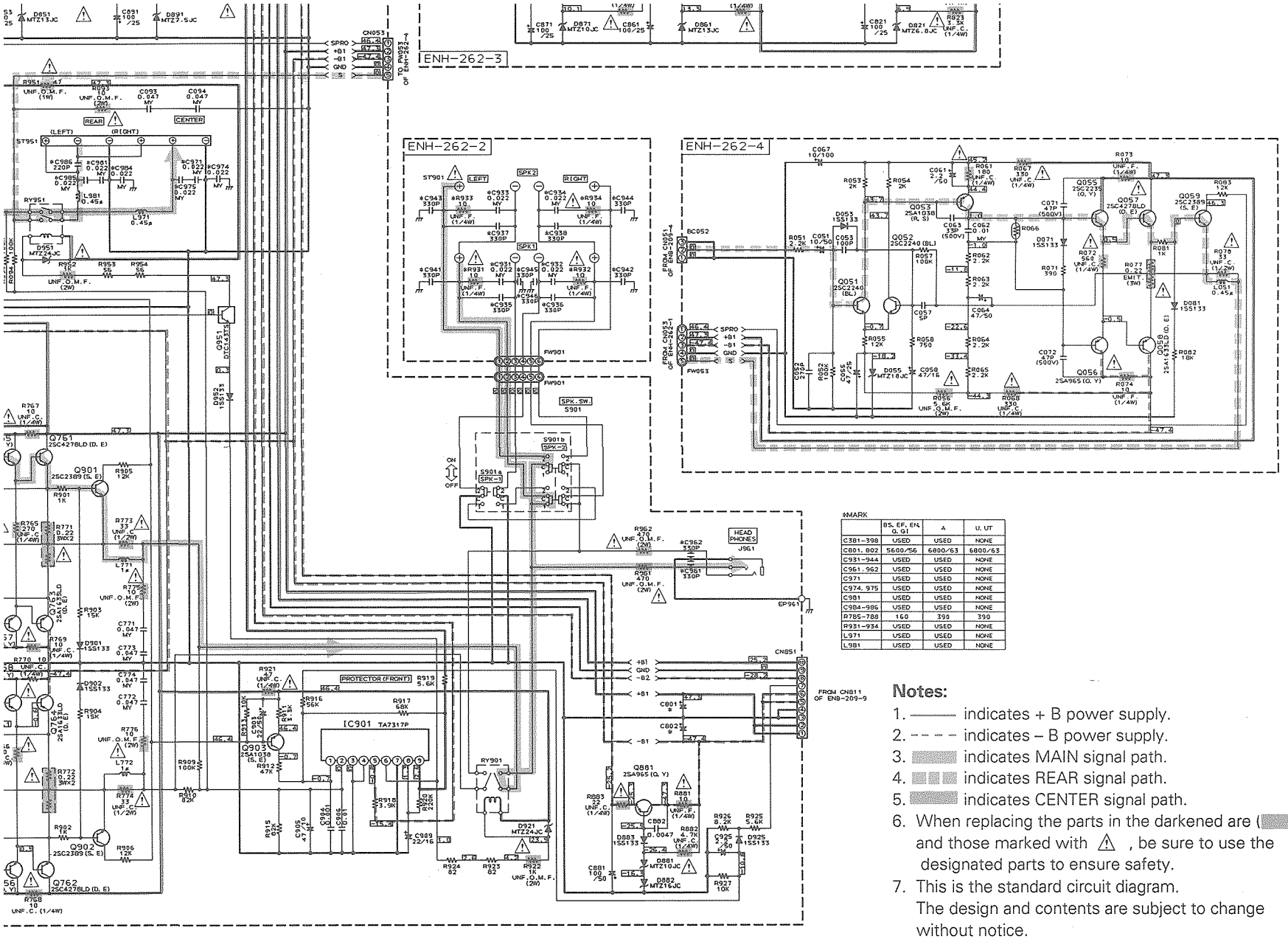


P1-34-c P1-34-d


CENTER AMP.
ENG-013
PRE DRIVER
POWER LIMITTER
POWER AMP
BIAS
TONE CONTROL
(TREBLE)
(BASS)
FROM BC551 OF ENB-209-4 SHEET 1/3
CN551
ENH-262-1
7
8
9
10
11
12
13

(2) Input Selector & Surround Section



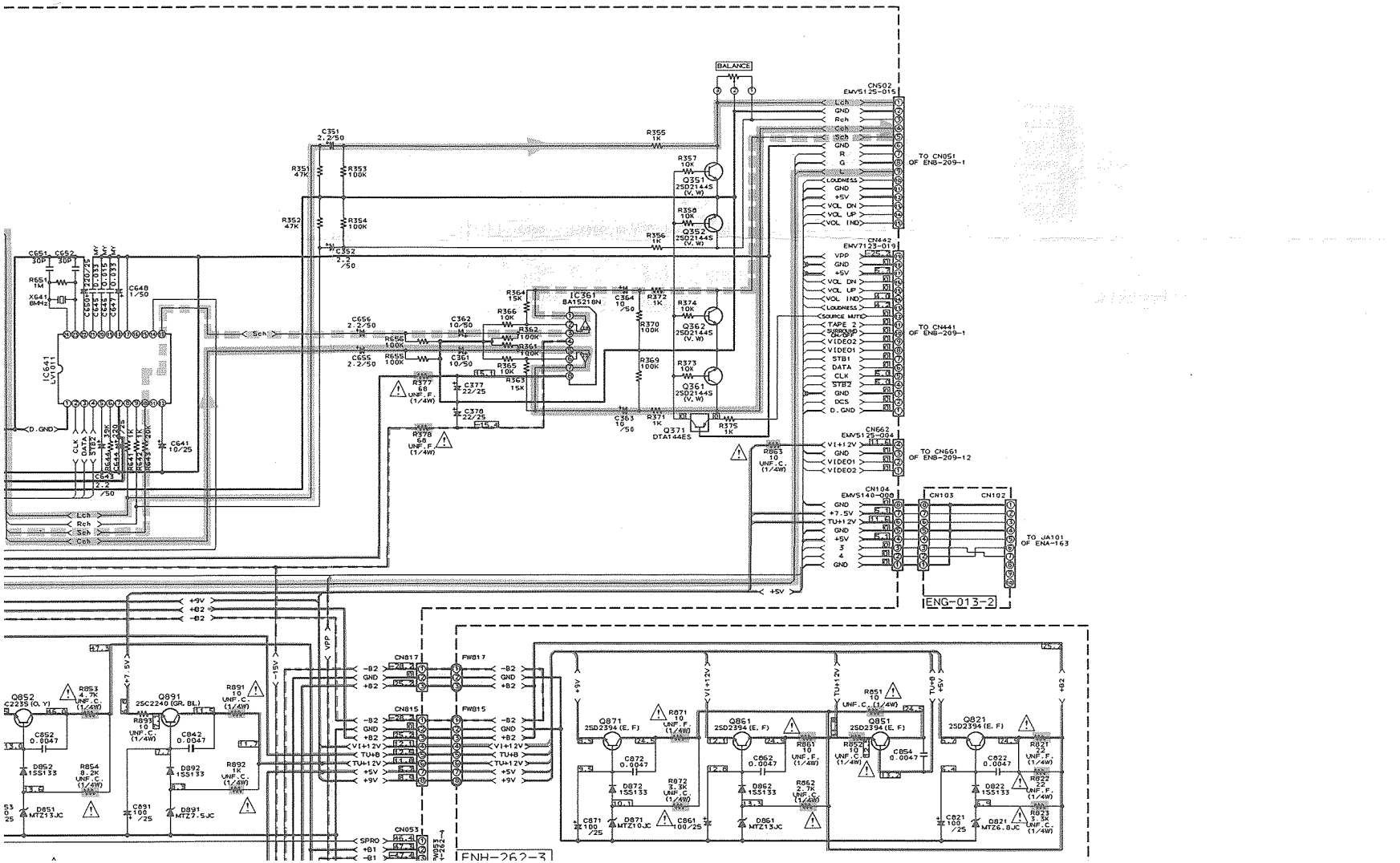


※MARK	BS, EF, EN, G, GI	A	U, UT
C381-398	USED	USED	NONE
C801, 802	5600/56	6800/63	6800/63
C931-944	USED	USED	NONE
C961, 962	USED	USED	NONE
C971	USED	USED	NONE
C974, 975	USED	USED	NONE
C981	USED	USED	NONE
C984-986	USED	USED	NONE
R785-788	160	390	390
R931-934	USED	USED	NONE
L971	USED	USED	NONE
L981	USED	USED	NONE

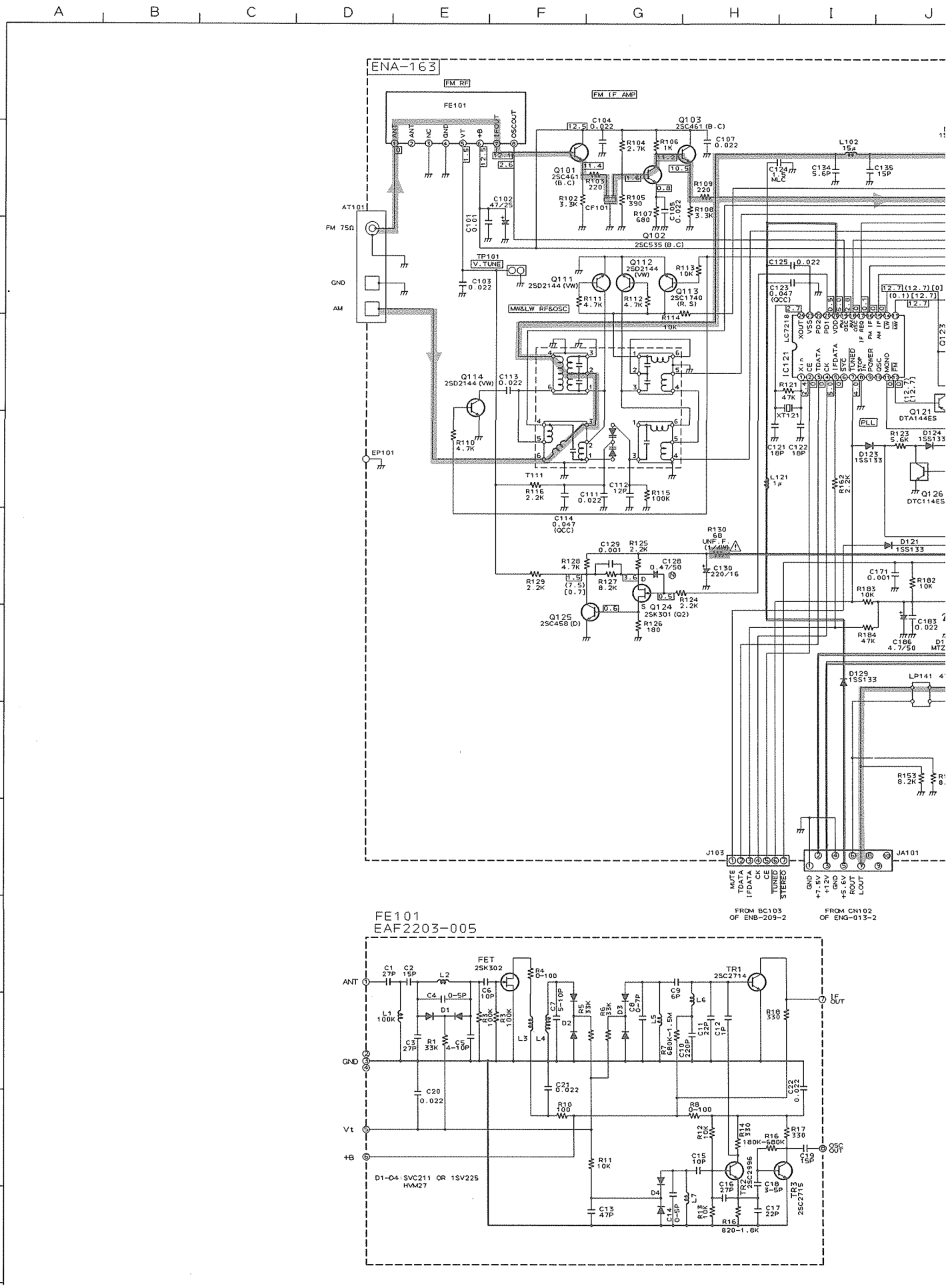
Notes:

1. ——— indicates + B power supply.
2. - - - - indicates – B power supply.
3. ▒▒▒ indicates MAIN signal path.
4. ▒▒▒ indicates REAR signal path.
5. ▒▒▒ indicates CENTER signal path.
6. When replacing the parts in the darkened are (▒▒▒) and those marked with ⚠ , be sure to use the designated parts to ensure safety.
7. This is the standard circuit diagram. The design and contents are subject to change without notice.

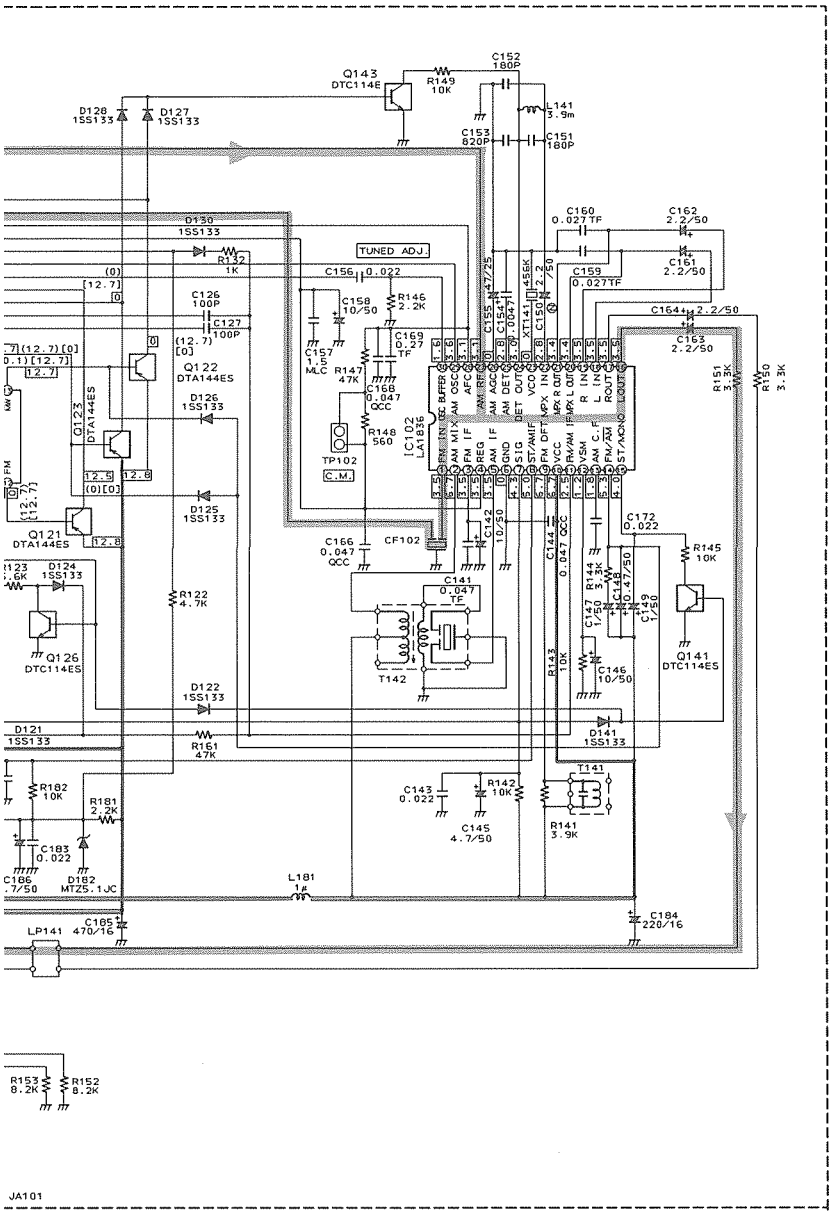
K L M N O P Q R S


BALANCE
CN502
EMV5125-015
TO CN051
OF ENB-209-1
CN442
EMV7123-019
TO CN441
OF ENB-209-1
CN562
EMV5125-004
TO CN561
OF ENB-209-12
CN104
EMV5140-000
CN103
CN102
TO JA101
OF ENA-163
ENG-013-2
IC641
LV1011
IC361
BA15218N
Q351
2SD2144S
(V, W)
Q352
2SD2144S
(V, W)
Q362
2SD2144S
(V, W)
Q361
2SD2144S
(V, W)
Q371
DTA144ES
Q852
2SC2240 (O, Y)
Q891
2SC2240 (GR, BL)
Q871
2SD2394 (E, F)
Q861
2SD2394 (E, F)
Q851
2SD2394 (E, F)
Q821
2SD2394 (E, F)
CN817
FW817
CN815
FW815
CN053
ENH-262-3
D.GND
+5V
+B2
-B2
+7.5V
-15V
VPP

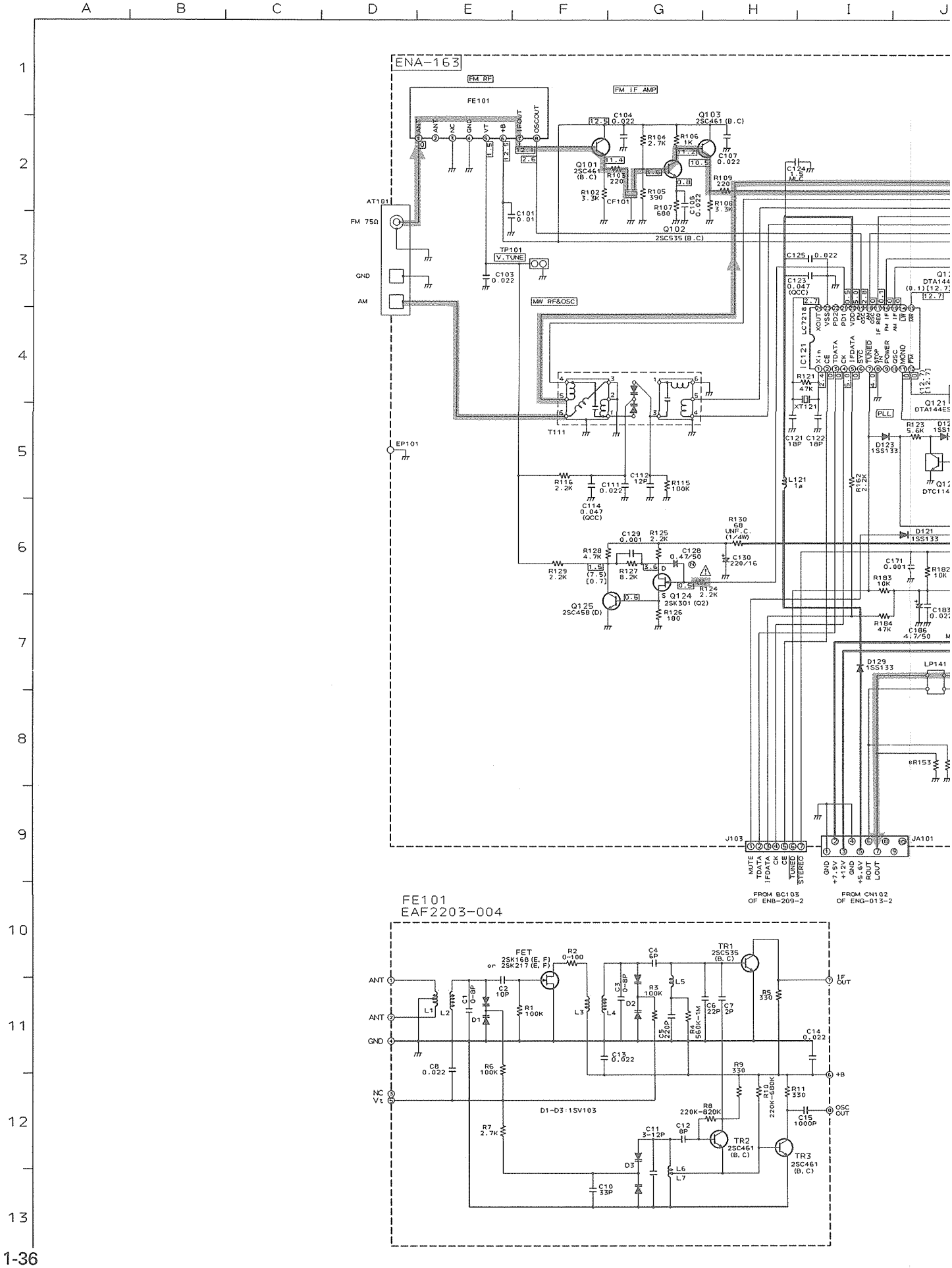
(3) Tuner Section (For BS, E, G)



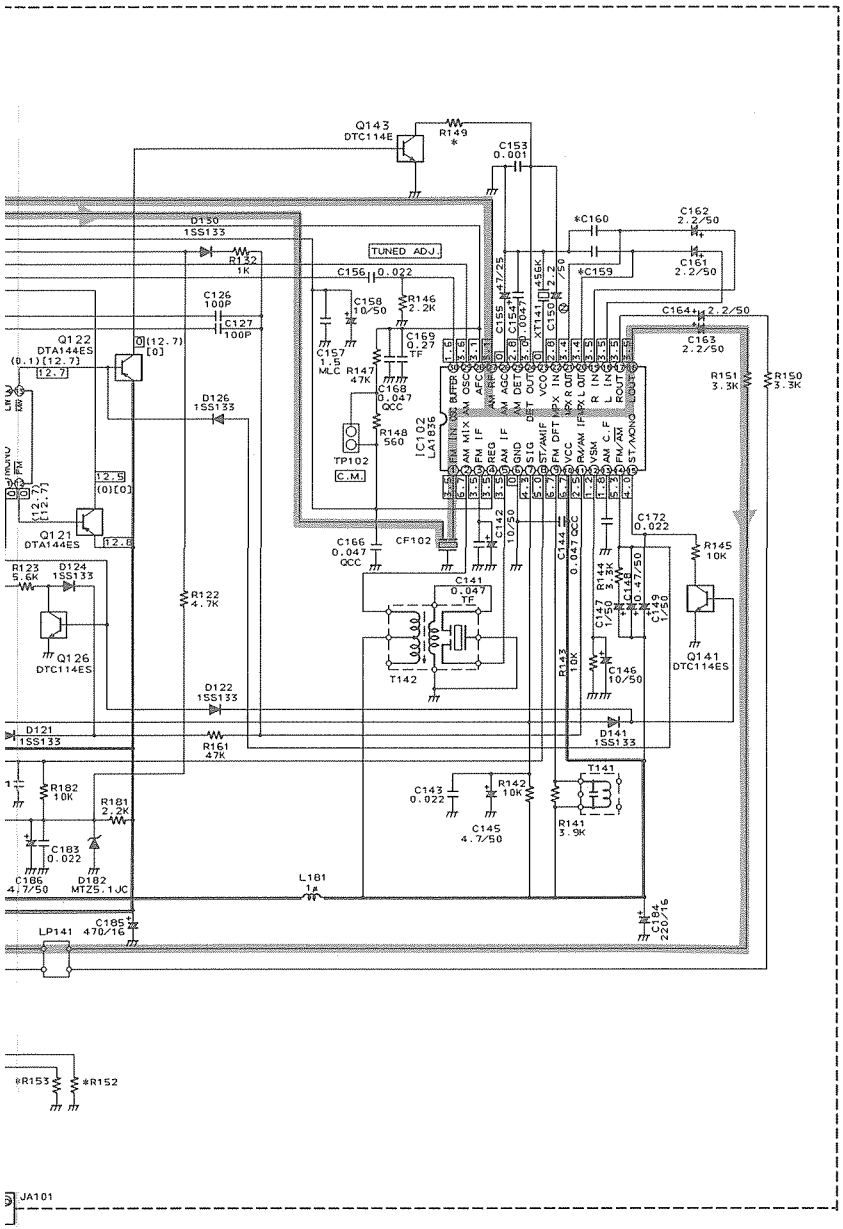
J K L M N O P Q R S



(4) Tuner Section (For U, UT, A)



J K L M N O P Q R S



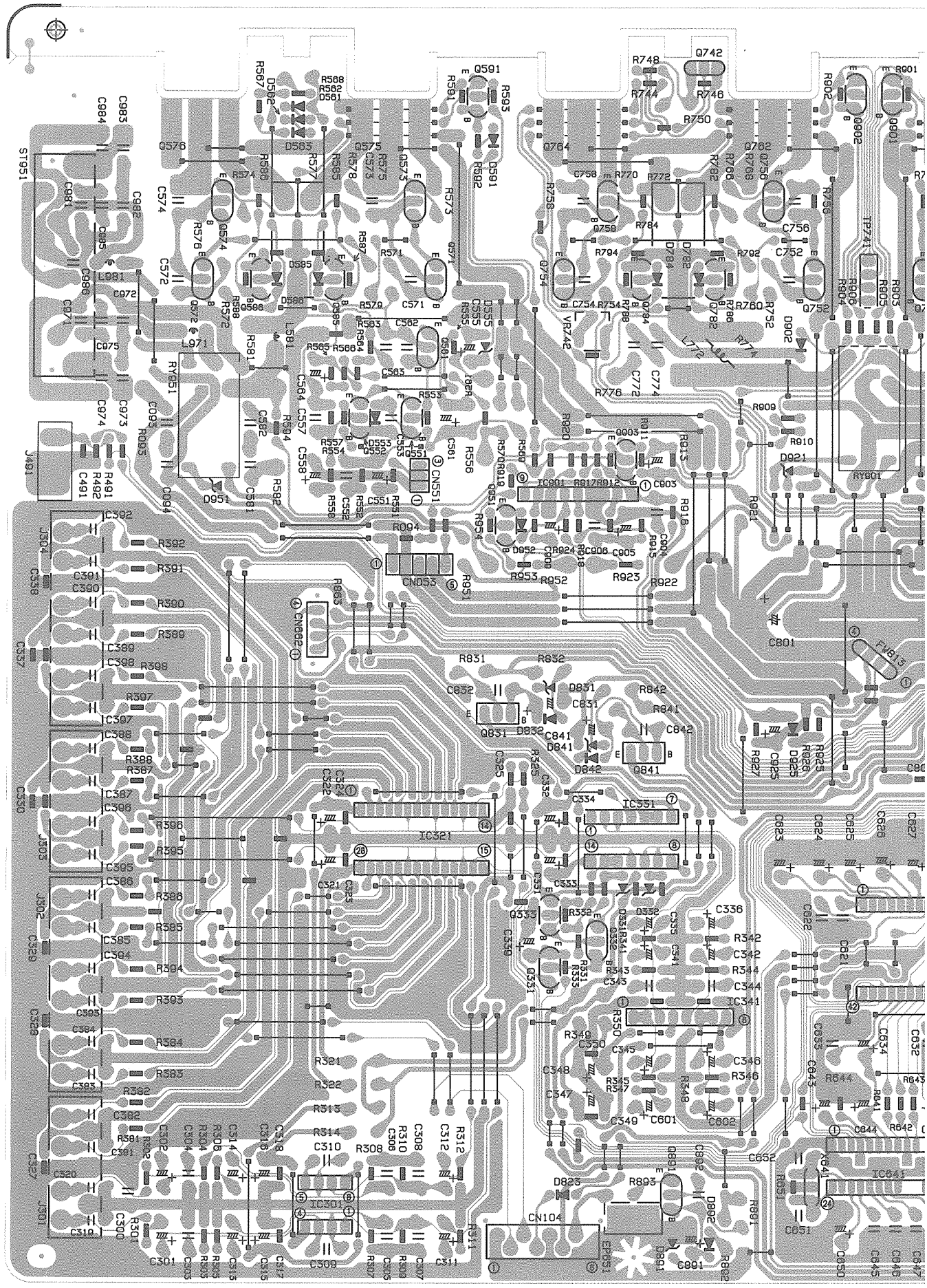
* MARK

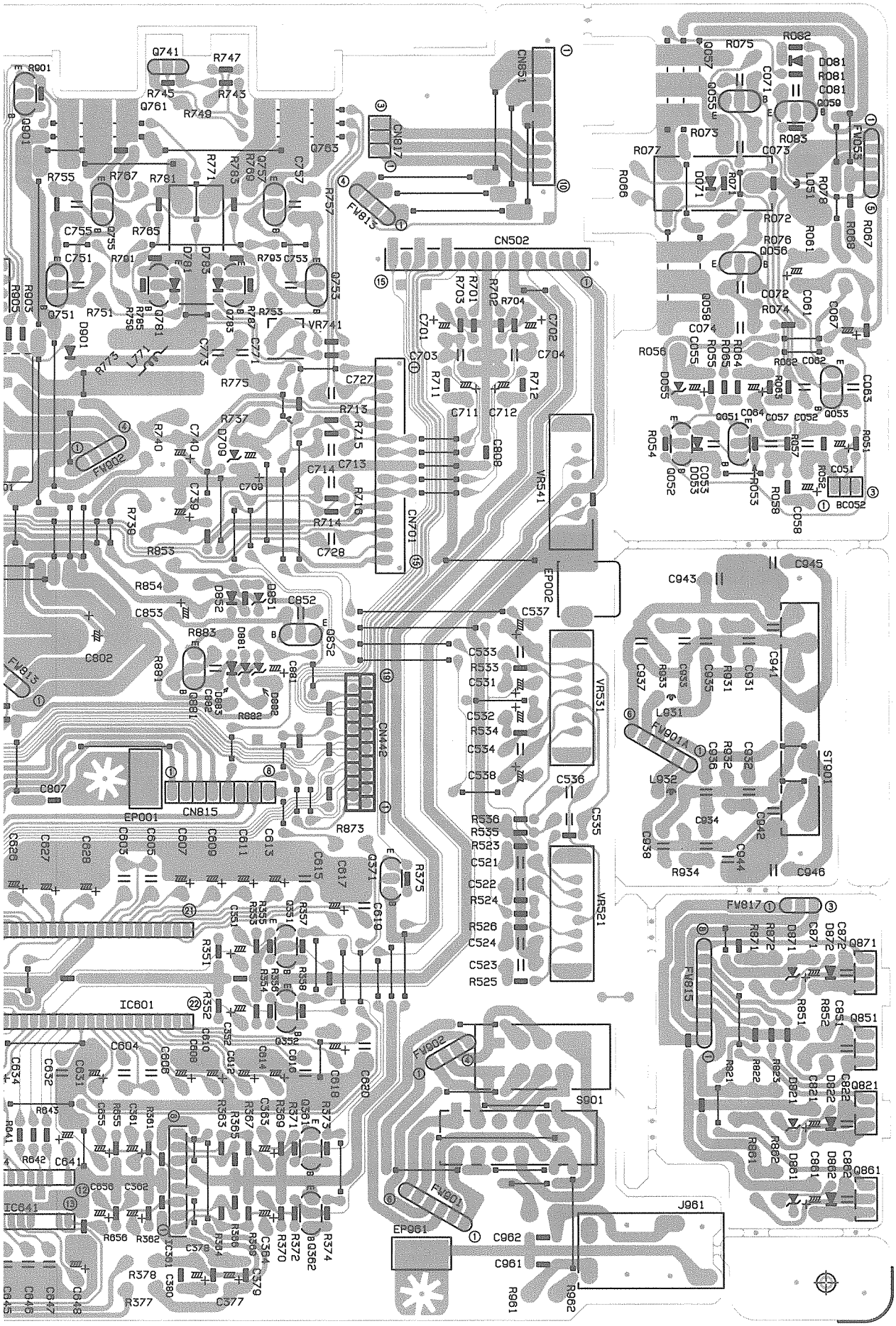
	U, UT	A
C159, 160	0.033TF	0.027TF
R149	22K	10K
R152, 153	3.3K	8.2K

FM AUTO NO SIGNAL
( )MW NO SIGNAL
[ ]LW NO SIGNAL

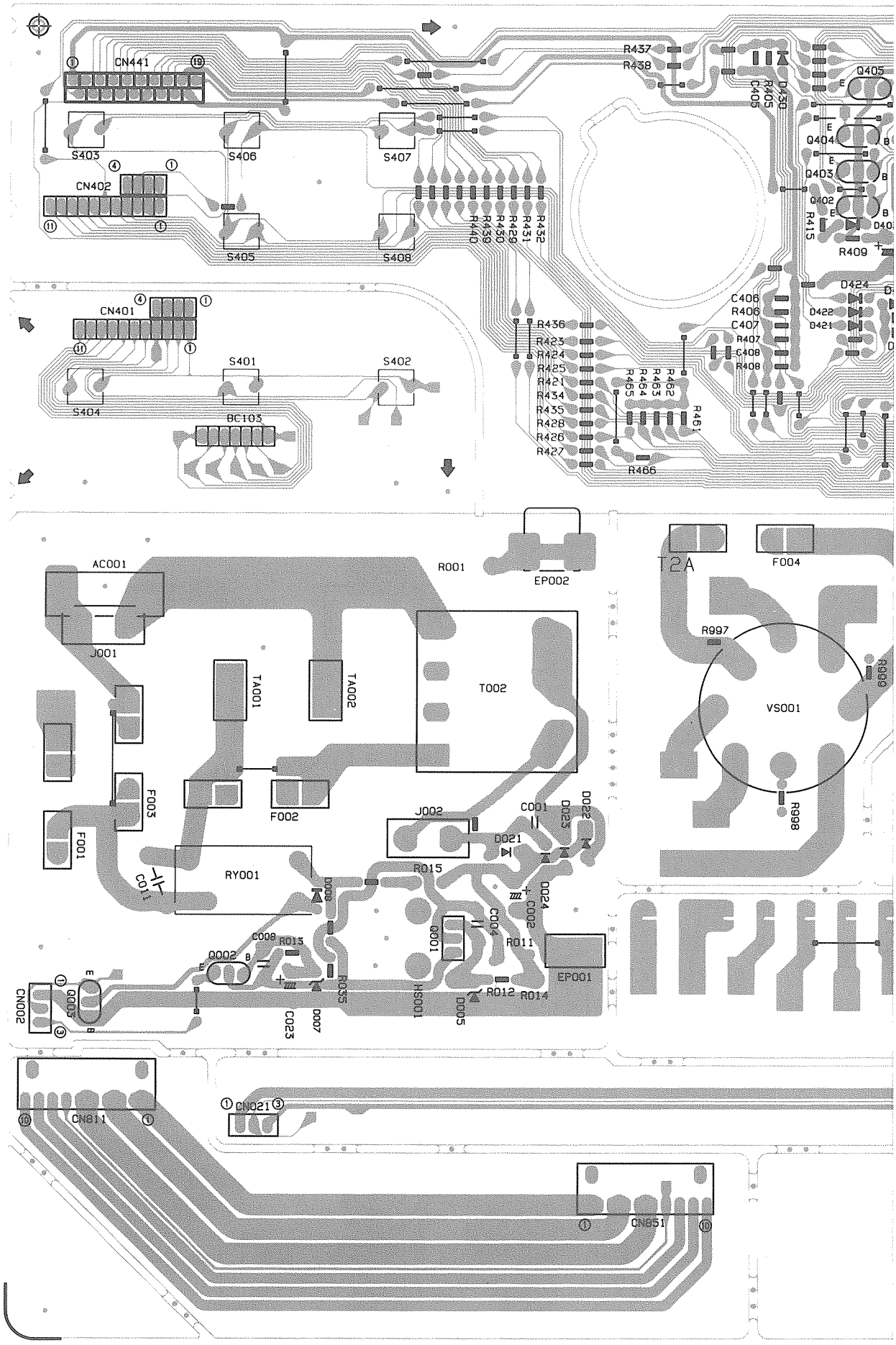
Printed Circuit Boards

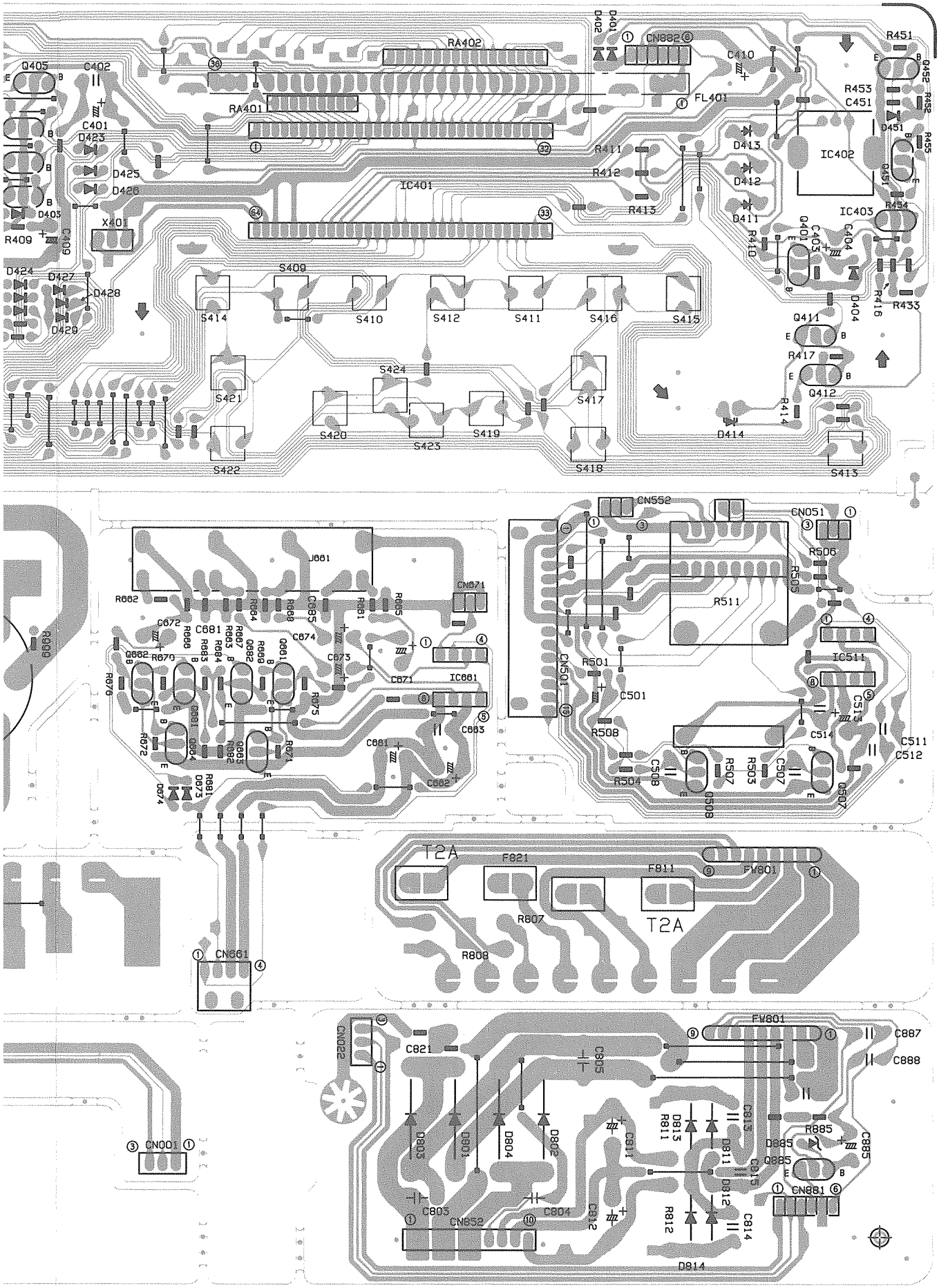
■ Input Selector & Power Amp P.C. Board (ENH-262)





■ Power Supply & System Control P.C. Board (ENB-209)




RA402
RA401
IC401
X401
S409
S414
S410
S412
S411
S416
S415
S421
S424
S420
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S419
S417
S422
S418
S413
D401
D402
CN882
C410
FL401
R451
R453
C451
D451
IC402
R452
R455
R454
IC403
R433
R416
D404
Q411
R417
Q412
R414
D414
Q405
C402
C401
D423
D425
D426
D405
R409
C409
D424
D427
D428
D429
Q401
C403
C404
D411
D412
D413
R410
R411
R412
R413
J661
CN671
R662
C672
C681
C674
C673
C671
IC661
C683
C682
C685
R661
R665
R664
R668
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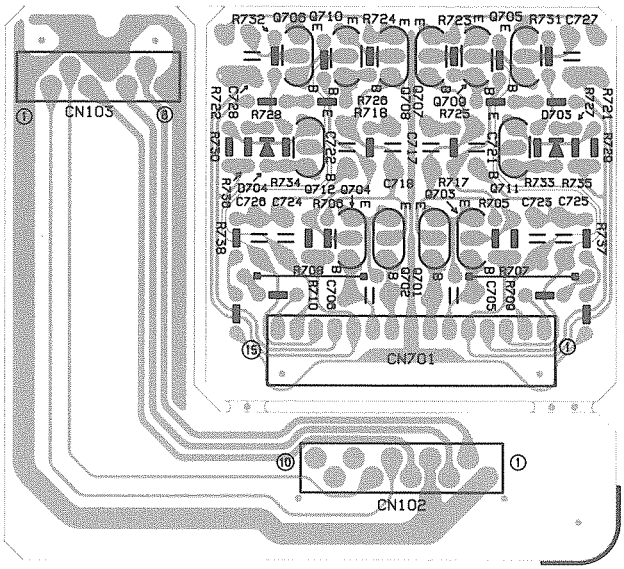
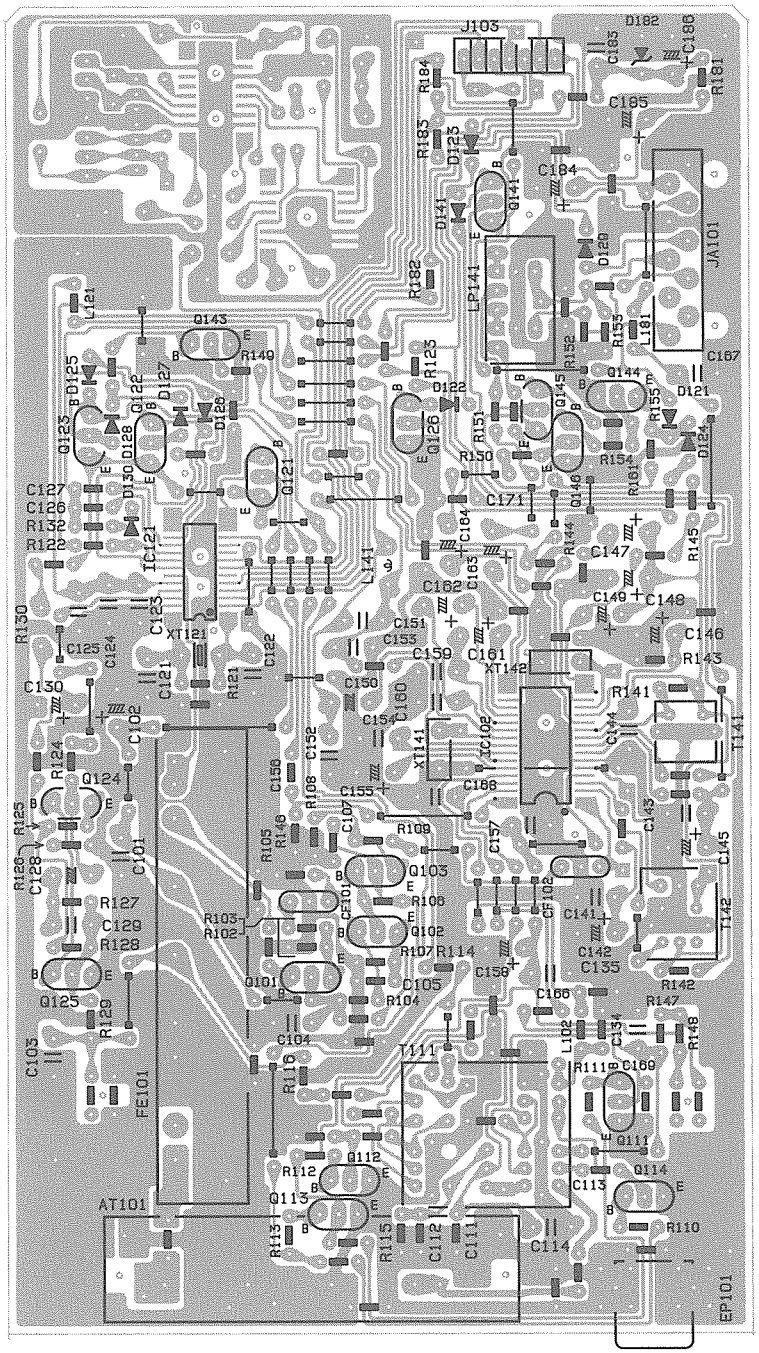
CN051
R506
R505
R511
CN501
R501
C501
R508
IC511
C513
C514
C511
C512
R504
C508
R507
R503
C507
Q508
Q507
T2A
F821
F811
FW801
R807
R808
T2A
CN661
CN022
C821
C805
C887
C888
D803
D801
D804
D802
C811
D813
R811
C813
R885
D885
Q885
C885
C815
D812
C814
R812
CN881
C803
CN852
C804
C812
D814

■ Pre-Driver P.C. Board (ENG-013)



■ Tuner P.C. Board (ENA-163)



PARTS LIST

*** All printed circuit boards and its assemblies are not available as service parts.**

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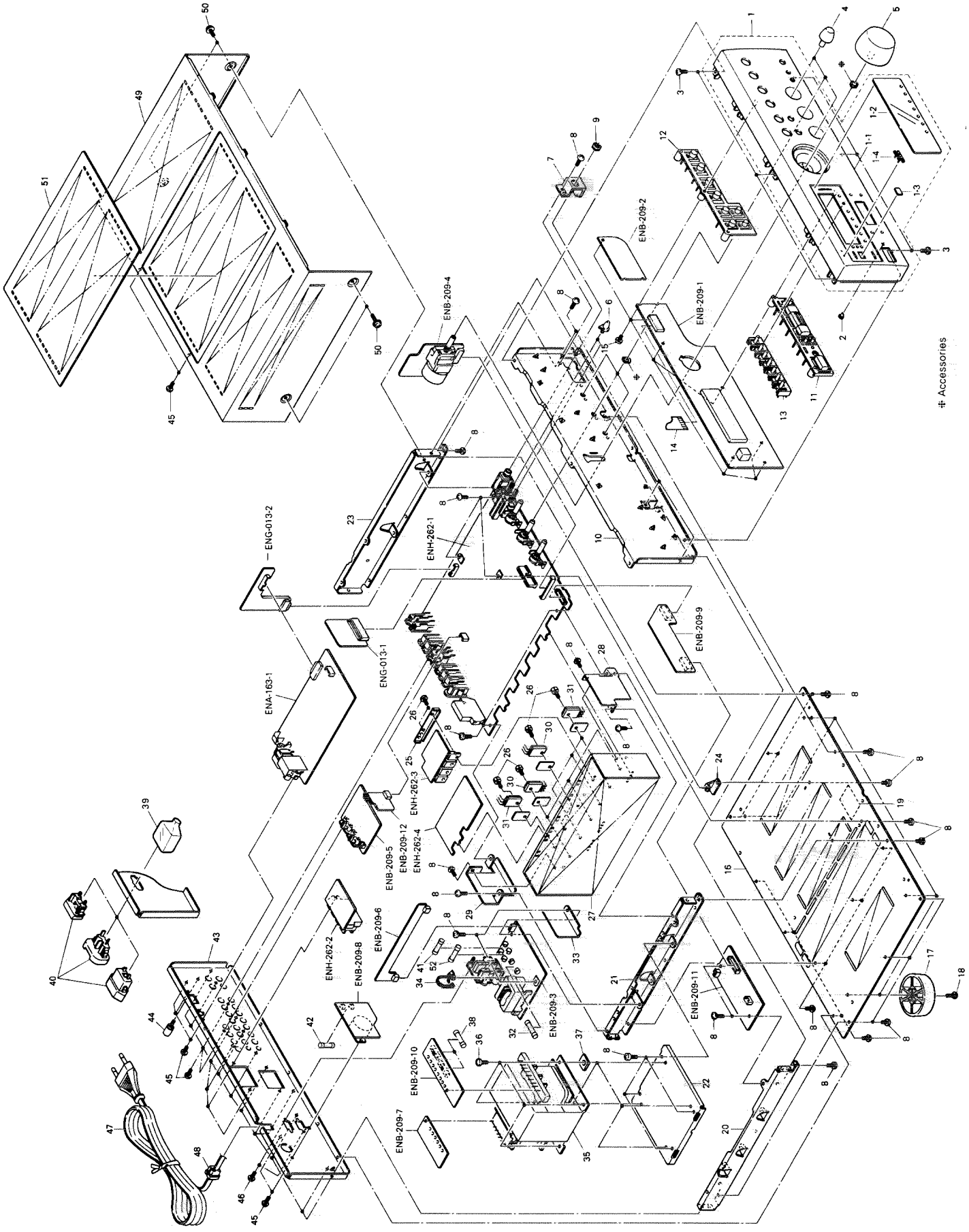
General Exploded View and Parts List

Symbol No. M 1 M M



■ Parts List

Symbol No. M 1 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-RX416VBKE(S	FRONT PANEL	1		
	1-1	E103037-001SM	FRONT PANEL	1		
	1-2	E309419-001SM	WINDOW SCREEN	1		
	1-3	E72436-006	REMORT SCREEN	1		
	1-4	VJD5429-001	JVC MARK	1		
	2	FSJD4001-002	INDICATOR LENS	1		
	3	SDSG3008M	TAPPING SCREW	6		
	4	E309111-003SM	BALANCE KNOB	3		
	5	E309465-001SM	VOLUME KNOB	1		
	6	E407321-002SM	PUSH BUTTON	2		
	7	E407323-002SM	HEADPHONE BRACKET	1		
	8	SBSG3008CC	TAPPING SCREW	39		
	9	VKZ4150-001	NUT	1		
	10	E103039-001SM	FRONT BRACKET	1		
	11	E208534-001SM	PUSH BUTTON	1		
	12	E208535-001SM	PUSH BUTTON	1		
	13	E309418-001SM	PUSH BUTTON	1		
	14	VWF1219-16TTB	FFC CABLE	1	FW441	
	15	SDSF2608Z	SCREW	8		
	16	E102371-006SM	BOTTOM PLATE	1		
	17	E406379-008SS	FOOT	4		BS,EF,EN,G,GI
		VJF4039-00F	FOOT	4		A,U,UT
	18	SBST3010Z	TAPPING SCREW	4		
	19	E70115-002	CAUTION LABEL	1		
	20	E206956-001SM	SIDE BRACKET	1	Left	
	21	E206958-004SM	CENTER BRACKET	1		
	22	E309423-001SM	TRANSFORMER BRACKET	1		
	23	E206957-001SM	SIDE BRACKET	1	Right	
	24	E68587-222SM	BRACKET PLATE	1		
	25	E406969-002SM	LEAF SPRING	1		
	26	E73525-003	SCREW	10		
	27	E308835-007SM	HEAT SINK	1		
	28	E309425-001SM	HEAT SINK BRACKET	1		
	29	E309426-001SM	HEAT SINK BRACKET	1		
	30	2SA1633LD(D,E)	SI.TRANSISTOR	4	Q763,764,576,058	
	31	2SC4278LD(D,E)	SI.TRANSISTOR	4	Q761,762,575,057	
⚠	32	QMF51A2-R10S	FUSE	1	F002	Except BS
⚠	32	QMF51E2-R10SBS	FUSE	1	F002	BS
	33	E408902-001SM	PROTECT COVER	1		
	34	E307572-001	FASTNER	1		
⚠	35	ETP1200-66EAJ	POWER TRANSFORMER	1		EF,EN,G,GI
⚠		ETP1200-66EAJBS	POWER TRANSFORMER	1		BS
⚠		ETP1200-66FAJ	POWER TRANSFORMER	1		U,UT,A
	36	E65389-004	SPECIAL SCREW	4		
	37	E406309-003SM	SPACER	4		
⚠	38	QMF51E2-2R0	FUSE	2	F811,821	
	39	E406079-001	COVER	1		BS
⚠	40	EMC0236-001	AC OUTLET	1		EF,EN,G,GI
⚠		EMC0237-001BS	AC OUTLET	1		BS
⚠		EMC0238-001	AC SOCKET	1		A
⚠	41	QMF51E2-2R0	FUSE	1	F001	A,EF,EN,GI,G,BS
⚠		QMF51E2-4R0	FUSE	1	F001	U,UT
⚠	42	QMF51E2-2R0	FUSE	1	F004	U,UT
	43	E208532-008	REAR PANEL	1		BS,EF,EN,G,GI
		E208532-002SM	REAR PANEL	1		A

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
		E208532-003SM	REAR PANEL	1		U,UT
	44	E408091-001	EARTH PLUG	1		
	45	E73273-003	SPECIAL SCREW	20		Except U,UT
		E73273-003	SPECIAL SCREW	23		U,UT
	46	SDSG3008CC	TAPPING SCREW	2		U,UT
⚠	47	QMP25F0-244	POWER CORD	1		A
⚠		QMP3900-200	POWER CORD	1		EF,EN,G,GI
⚠		QMP5530-0085BS	POWER CORD	1		BS
⚠		QMP7520-200	POWER CORD	1		U,UT
⚠	48	QHS3771-108	CORD STOPPER	1		Except BS
⚠		QHS3771-108BS	CORD STOPPER	1		BS
	49	E207049-007(S)	METAL COVER	1		
	50	E61660-004	SPECIAL SCREW	4		
	51	E208294-001	PROTECTOR COVER	1		
⚠	52	QMF51E2-1R25	FUSE	1	F003	EF,EN,G,GI
	-	QZL1031-101	SEV LABEL	1		EF
	-	E309384-012	RATING LABEL	1		UT
	-	E407619-042	FTZ LABEL	1		G
	-	E408450-001	CE LABEL	1		BS,EF,EN,G,GI
	-	E70028-001	APPROVAL LABEL	1		EN
	-	E75040-056	GI LABEL	1		GI
	-	E75139-003	Z LABEL	1		U,UT
	-	QZL1007-001	BEAB LABEL	1		BS

⚠ : Safety Parts

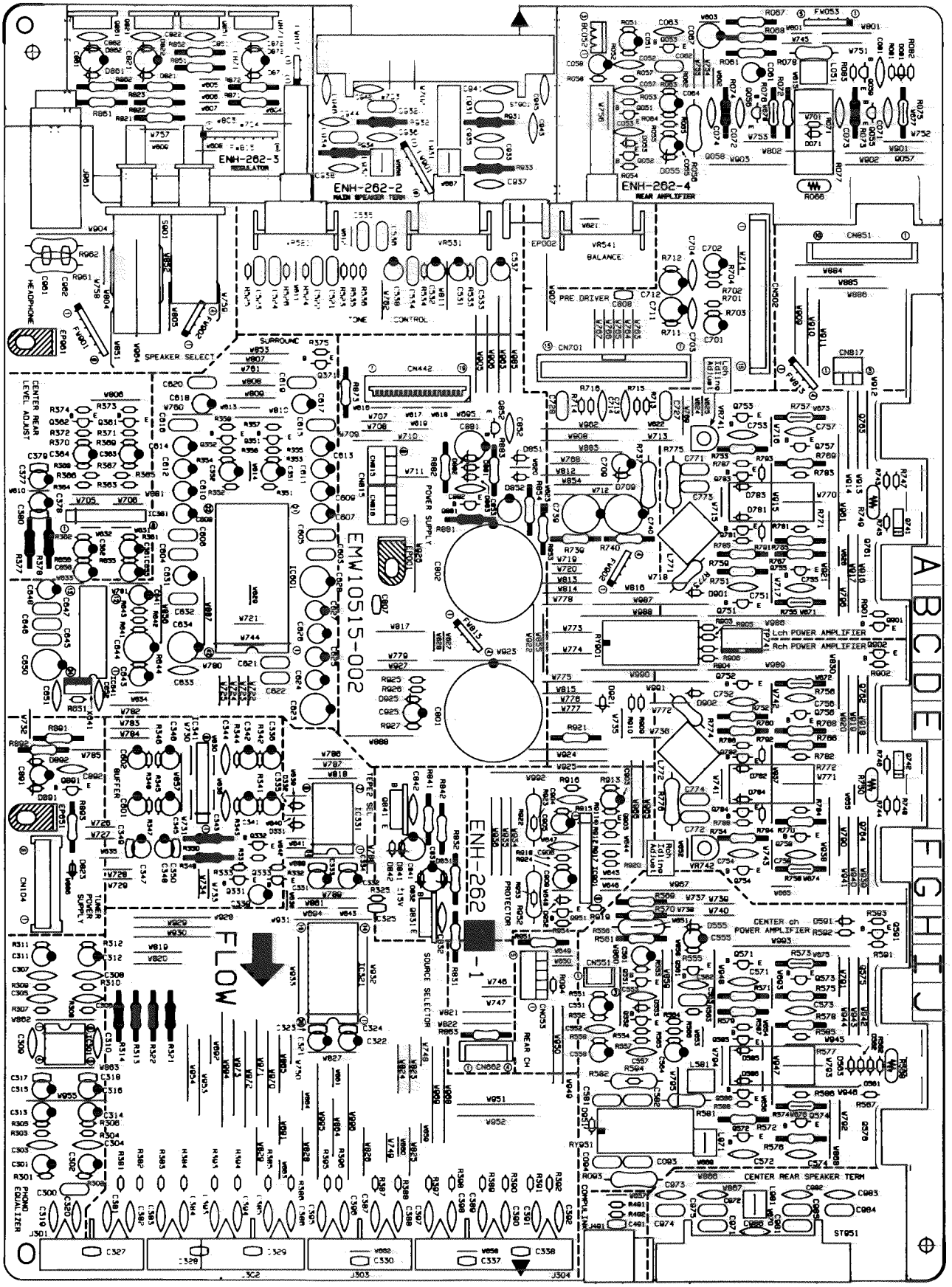
The Marks for Designated Areas

A ..... Australia
BS .... the U.K.
EF ..... Continental Europe
EN .... Scandinavia
GI .... Italy
G ..... Germany
U ..... Universal Type
UT .... Taiwan
No mark indicates all area.

Printed Circuit Board Ass'y and Parts List

■ ENH-262 □ Input Selector & Power Amp PC Board Ass'y

Note : ENH-262 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENH-262 [E]	EF EN GI G	Continental Europe Scandinavia Italy Germany
ENH-262 [F]	BS	the U.K.
ENH-262 [G]	A	Australia
ENH-262 [H]	U UT	Universal Type Taiwan

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q051	2SC2240(BL)	SI.TRANSIST	
	Q052	2SC2240(BL)	SI.TRANSIST	
	Q053	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q055	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q056	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q059	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q331	DTA144ES	DIGITAL TRA ROHM	
	Q332	DTC144ES	DIGITAL TRA ROHM	
	Q333	DTC144ES	DIGITAL TRA ROHM	
	Q351	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q352	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q361	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q362	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q371	DTA144ES	DIGITAL TRA ROHM	
	Q551	2SC2240(BL)	SI.TRANSIST	
	Q552	2SC2240(BL)	SI.TRANSIST	
	Q561	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q571	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q572	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q573	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q574	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q585	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q586	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q591	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q741	2SD636	SI.TRANSIST MATSUSHITA	
	Q742	2SD636	SI.TRANSIST MATSUSHITA	
	Q751	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q752	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q753	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q754	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q755	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q756	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q757	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q758	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q781	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q782	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q783	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q784	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q821	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q831	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q841	2SB1565(E,F)	SI.TRANSIST ROHM	
	Q851	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q852	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q861	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q871	2SD2394(E,F)	SI.TRANSIST ROHM	
	Q881	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q891	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q901	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q902	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q903	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q951	DTC143TS	DIGITAL TRA ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	VC4580DD	I.C(MONO-AN DAINICHI	
	IC321	TC9164N	I.C(DIGI-MO TOSHIBA	
	IC331	UPD4066BC	I.C(DIGI-MO NEC	
	IC341	BA15218N	I.C(MONO-AN ROHM	
	IC361	BA15218N	I.C(MONO-AN ROHM	
	IC601	LA2785	I.C(M) SANYO	
	IC641	LV1011	I.C(M) SANYO	
	IC901	TA7317P	I.C(MONO-AN TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D053	1SS133	SI.DIODE ROHM	
	D055	MTZ18JC	ZENER DIODE ROHM	
	D071	1SS133	SI.DIODE ROHM	
	D081	1SS133	SI.DIODE ROHM	
	D331	MTZ8.2JC	ZENER DIODE ROHM	
	D332	MTZ8.2JC	ZENER DIODE ROHM	
	D553	1SS133	SI.DIODE ROHM	
	D555	MTZ18JC	ZENER DIODE ROHM	
	D561	1SS133	SI.DIODE ROHM	
	D562	1SS133	SI.DIODE ROHM	
	D563	1SS133	SI.DIODE ROHM	
	D585	1SS133	SI.DIODE ROHM	
	D586	1SS133	SI.DIODE ROHM	
	D591	1SS133	SI.DIODE ROHM	
	D709	MTZ18JC	ZENER DIODE ROHM	
	D781	1SS133	SI.DIODE ROHM	
	D782	1SS133	SI.DIODE ROHM	
	D783	1SS133	SI.DIODE ROHM	
	D784	1SS133	SI.DIODE ROHM	
	D821	MTZ6.8JC	ZENER DIODE ROHM	
	D822	1SS133	SI.DIODE ROHM	
	D831	MTZ16JC	ZENER DIODE ROHM	
	D832	1SS133	SI.DIODE ROHM	
	D841	MTZ16JC	ZENER DIODE ROHM	
	D842	1SS133	SI.DIODE ROHM	
	D851	MTZ13JC	ZENER DIODE ROHM	
	D852	1SS133	SI.DIODE ROHM	
	D861	MTZ13JC	ZENER DIODE ROHM	
	D862	1SS133	SI.DIODE ROHM	
	D871	MTZ10JC	ZENER DIODE ROHM	
	D872	1SS133	SI.DIODE ROHM	
	D881	MTZ10JC	ZENER DIODE ROHM	
	D882	MTZ16JC	ZENER DIODE ROHM	
	D883	1SS133	SI.DIODE ROHM	
	D891	MTZ8.2JC	ZENER DIODE ROHM	
	D892	1SS133	SI.DIODE ROHM	
	D901	1SS133	SI.DIODE ROHM	
	D902	1SS133	SI.DIODE ROHM	
	D921	MTZ24JC	ZENER DIODE ROHM	
	D925	1SS133	SI.DIODE ROHM	
	D951	MTZ24JC	ZENER DIODE ROHM	
	D952	1SS133	SI.DIODE ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION		
	C051	QETB1HM-106	10MF	50V	E.CAPACITO
	C052	QCS21HJ-271A	270PF	50V	CER.CAPACI
	C053	QCS21HJ-101A	100PF	50V	CER.CAPACI
	C055	QETB1EM-476	47MF	25V	AL E.CAPAC
	C057	QCS21HJ-5R0	5PF	50V	CER.CAPACI
	C058	QETB1CM-476	47MF	16V	AL E.CAPAC
	C061	QETB1HM-225	2.2MF	50V	AL E.CAPAC
	C062	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA
	C063	QCS22HJ-330	33PF	500V	CER.CAPACI
	C064	QETB1HM-476	47MF	50V	E.CAPACITO
	C067	QETB2AM-106	10MF	100V	AL E.CAPAC
	C071	QCS22HJ-470A	47PF	500V	CER.CAPACI
	C072	QCS22HJ-470A	47PF	500V	CER.CAPACI
	C093	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA
	C094	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA
	C300	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA
	C301	QETB1HM-475E	4.7MF	50V	E.CAPACITO
	C302	QETB1HM-475E	4.7MF	50V	E.CAPACITO
	C303	QCS21HJ-101A	100PF	50V	CER.CAPACI
	C304	QCS21HJ-101A	100PF	50V	CER.CAPACI
	C305	QCY31HK-182Z	1800PF	50V	CER.CAPACI
	C306	QCY31HK-182Z	1800PF	50V	CER.CAPACI
	C307	QCY31HK-682Z	6800PF	50V	CER.CAPACI
	C308	QCY31HK-682Z	6800PF	50V	CER.CAPACI
	C309	QCS21HJ-101A	100PF	50V	CER.CAPACI
	C310	QCS21HJ-101A	100PF	50V	CER.CAPACI
	C311	QETB1HM-475E	4.7MF	50V	E.CAPACITO
	C312	QETB1HM-475E	4.7MF	50V	E.CAPACITO
	C313	QETB1AM-107	100MF	10V	AL E.CAPAC
	C314	QETB1AM-107	100MF	10V	AL E.CAPAC
	C315	QETB1CM-476	47MF	16V	AL E.CAPAC
	C316	QETB1CM-476	47MF	16V	AL E.CAPAC
	C319	QCS31HJ-331Z	330PF	50V	CER.CAPACI
	C320	QCS31HJ-331Z	330PF	50V	CER.CAPACI
	C321	QETB1EM-226N	22MF	25V	E.CAPACITO
	C322	QETB1EM-226N	22MF	25V	E.CAPACITO
	C325	QCBB1HK-221Y	220PF	50V	CER.CAPACI
	C331	QETB1EM-226N	22MF	25V	E.CAPACITO
	C332	QETB1EM-226N	22MF	25V	E.CAPACITO
	C335	QETB1HM-105	1MF	50V	AL E.CAPAC
	C336	QETB1HM-105	1MF	50V	AL E.CAPAC
	C339	QETB1HM-475E	4.7MF	50V	E.CAPACITO
	C341	QETB1HM-106	10MF	50V	E.CAPACITO
	C342	QETB1HM-106	10MF	50V	E.CAPACITO
	C343	QCS21HJ-221	220PF	50V	CER.CAPACI

⚠ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C344	QCS21HJ-221	220PF	50V	CER.CAPACI	
	C345	QETB1HM-106	10MF	50V	E.CAPACITO	
	C346	QETB1HM-106	10MF	50V	E.CAPACITO	
	C347	QETB1EM-226N	22MF	25V	E.CAPACITO	
	C348	QETB1EM-226N	22MF	25V	E.CAPACITO	
	C351	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C352	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C361	QETB1HM-106	10MF	50V	E.CAPACITO	
	C362	QETB1HM-106	10MF	50V	E.CAPACITO	
	C363	QETB1HM-106	10MF	50V	E.CAPACITO	
	C364	QETB1HM-106	10MF	50V	E.CAPACITO	
	C377	QETB1EM-226N	22MF	25V	E.CAPACITO	
	C378	QETB1EM-226N	22MF	25V	E.CAPACITO	
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C381	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C382	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C385	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C386	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C387	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C388	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C389	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C390	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C391	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C392	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C393	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C394	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C395	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN

△ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C396	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C397	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C398	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C491	QCBB1HK-331Y	330PF	50V	CER.CAPACI	
	C521	QFLB1HJ-332	3300PF	50V	MYLAR CAPA	
	C522	QFLB1HJ-332	3300PF	50V	MYLAR CAPA	
	C523	QFLB1HJ-183	0.018MF	50V	MYLAR CAPA	
	C524	QFLB1HJ-183	0.018MF	50V	MYLAR CAPA	
	C531	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C532	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C533	QFLB1HJ-153	0.015MF	50V	MYLAR CAPA	
	C534	QFLB1HJ-153	0.015MF	50V	MYLAR CAPA	
	C535	QFLB1HJ-823	0.082MF	50V	MYLAR CAPA	
	C536	QFLB1HJ-823	0.082MF	50V	MYLAR CAPA	
	C537	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C538	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C551	QETB1HM-106	10MF	50V	E.CAPACITO	
	C552	QCS21HJ-271A	270PF	50V	CER.CAPACI	
	C553	QCS21HJ-101A	100PF	50V	CER.CAPACI	
	C555	QETB1EM-476	47MF	25V	AL E.CAPAC	
	C557	QCS21HJ-5R0	5PF	50V	CER.CAPACI	
	C558	QETB1CM-476	47MF	16V	AL E.CAPAC	
	C561	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C562	QCS22HJ-330	33PF	500V	CER.CAPACI	
	C563	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA	
	C564	QETB1HM-476	47MF	50V	E.CAPACITO	
	C571	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C572	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C581	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C582	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C601	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C602	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C603	QFLB1HJ-104	0.1MF	50V	MYLAR CAPA	
	C604	QFLB1HJ-104	0.1MF	50V	MYLAR CAPA	
	C605	QFLB1HJ-104	0.1MF	50V	MYLAR CAPA	
	C606	QFLB1HJ-104	0.1MF	50V	MYLAR CAPA	
	C607	QETB1HM-474	0.47MF	50V	ELECTRO	
	C608	QETB1HM-474	0.47MF	50V	ELECTRO	
	C609	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C610	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C611	QETB1HM-474	0.47MF	50V	ELECTRO	
	C612	QETB1HM-474	0.47MF	50V	ELECTRO	
	C613	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C614	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C615	QFV81HJ-154	0.15MF	50V	THIN FILM	
	C616	QFV81HJ-154	0.15MF	50V	THIN FILM	
	C617	QETB1HM-335	3.3MF	50V	AL E.CAPAC	
	C618	QETB1HM-335	3.3MF	50V	AL E.CAPAC	
	C619	QFV81HJ-154	0.15MF	50V	THIN FILM	
	C620	QFV81HJ-154	0.15MF	50V	THIN FILM	
	C621	QFN81HJ-223	0.022MF	50V	METAL.MYLA	
	C622	QFN81HJ-473	0.047MF	50V	METAL.MYLA	
	C623	QETB1EM-227	220MF	25V	AL E.CAPAC	
	C624	QETB1EM-106	10MF	25V	AL E.CAPAC	
	C625	QETB1EM-106	10MF	25V	AL E.CAPAC	
	C626	QETB1EM-106	10MF	25V	AL E.CAPAC	
	C627	QETB1EM-106	10MF	25V	AL E.CAPAC	
	C628	QETB1EM-227	220MF	25V	AL E.CAPAC	
	C631	QETB1EM-476	47MF	25V	AL E.CAPAC	
	C632	QFV71HJ-474ZM	0.47MF	50V	THIN FILM	
	C633	QCS31HJ-681Z	680PF	50V	CER.CAPACI	
	C634	QETB1EM-227	220MF	25V	AL E.CAPAC	
	C641	QETB1EM-106	10MF	25V	AL E.CAPAC	
	C643	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C644	QETB1EM-227	220MF	25V	AL E.CAPAC	
	C645	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	
	C646	QFN81HJ-152	1500PF	50V	METAL.MYLA	
	C647	QFN81HJ-333	0.033MF	50V	MYLAR CAPA	
	C648	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C650	QETB1EM-227	220MF	25V	AL E.CAPAC	
	C651	QCS21HJ-300	30PF	50V	CER.CAPACI	
	C652	QCS21HJ-300	30PF	50V	CER.CAPACI	
	C655	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C656	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C701	QETB1HM-106	10MF	50V	E.CAPACITO	
	C702	QETB1HM-106	10MF	50V	E.CAPACITO	
	C703	QCS21HJ-271A	270PF	50V	CER.CAPACI	
	C704	QCS21HJ-271A	270PF	50V	CER.CAPACI	
	C709	QETB1EM-476	47MF	25V	AL E.CAPAC	
	C711	QETB1CM-107	100MF	16V	AL E.CAPAC	
	C712	QETB1CM-107	100MF	16V	AL E.CAPAC	
	C713	QCS21HJ-100	10PF	50V	CER.CAPACI	
	C714	QCS21HJ-100	10PF	50V	CER.CAPACI	
	C727	QFLB1HJ-472	4700PF	50V	MYLAR CAPA	

△ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C728	QFLB1HJ-472	4700PF	50V	MYLAR CAPA	
	C739	QETB1JM-107	100MF	63V	AL E.CAPAC	
	C740	QETB1JM-107	100MF	63V	AL E.CAPAC	
	C751	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C752	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C753	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C754	QCS22HJ-470A	47PF	500V	CER.CAPACI	
	C771	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C772	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C773	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C774	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C801	EEW5611-568E	5600MF		AL E.CAPAC	BS
	C801	EEW5611-568E	5600MF		AL E.CAPAC	EF
	C801	EEW5611-568E	5600MF		AL E.CAPAC	EN
	C801	EEW5611-568E	5600MF		AL E.CAPAC	G
	C801	EEW5611-568E	5600MF		AL E.CAPAC	GI
	C801	EEW6318-688E	6800MF		E.CAPACITO	A
	C801	EEW6318-688E	6800MF		E.CAPACITO	U
	C801	EEW6318-688E	6800MF		E.CAPACITO	UT
	C802	EEW5611-568E	5600MF		AL E.CAPAC	BS
	C802	EEW5611-568E	5600MF		AL E.CAPAC	EF
	C802	EEW5611-568E	5600MF		AL E.CAPAC	EN
	C802	EEW5611-568E	5600MF		AL E.CAPAC	G
	C802	EEW5611-568E	5600MF		AL E.CAPAC	GI
	C802	EEW6318-688E	6800MF		E.CAPACITO	A
	C802	EEW6318-688E	6800MF		E.CAPACITO	U
	C802	EEW6318-688E	6800MF		E.CAPACITO	UT
	C808	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C821	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C822	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C831	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C832	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C841	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C842	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C851	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C852	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C853	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C861	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C862	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C871	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C872	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C881	QETB1HM-107	100MF	50V	E.CAPACITO	
	C882	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C891	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C892	QCF21HP-472	4700PF	50V	CER.CAPACI	
	C903	QETB1HM-226E	22MF	50V	E.CAPACITO	
	C904	QCY31HK-102Z	1000PF	50V	CER.CAPACI	
	C905	QETB1AM-476	47MF	10V	E.CAPACITO	
	C906	QCF21HP-103A	0.01MF	50V	CER.CAPACI	
	C909	QETB1CM-226	22MF	16V	E.CAPACITO	
	C925	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C931	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C932	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C933	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C934	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C935	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C936	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C937	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C938	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C941	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C942	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C943	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C944	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C945	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	A
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	BS
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EF
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	EN
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	G
	C946	QCS31HJ-331Z	330PF	50V	CER.CAPACI	GI
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	A
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	BS
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	EF
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	EN
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	G
	C961	QCBB1HK-331Y	330PF	50V	CER.CAPACI	GI
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	A
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	BS
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	EF
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	EN
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	G
	C962	QCBB1HK-331Y	330PF	50V	CER.CAPACI	GI
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C971	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C974	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C975	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C981	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C984	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	A
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	BS
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EF
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	EN
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	G
	C985	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	GI
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	A
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	BS
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	EF
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	EN
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	G
	C986	QCS21HJ-221	220PF	50V	CER.CAPACI	GI

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R051	QRD161J-222	2.2K	1/6W	CARBON RES	
	R052	QRD161J-104	100K	1/6W	CARBON RES	
	R053	QRD161J-202	2K	1/6W	CARBON RES	
	R054	QRD161J-202	2K	1/6W	CARBON RES	
	R055	QRD161J-123	12K	1/6W	CARBON RES	
⚠	R056	QRG022J-562A	5.6K	2W	OXIDE META	
	R057	QRD161J-104	100K	1/6W	CARBON RES	
	R058	QRD167J-751	750	1/6W	CARBON RES	
⚠	R061	QRD14CJ-181S	180	1/4W	UNF.CARBON	
	R062	QRD161J-222	2.2K	1/6W	CARBON RES	
	R063	QRD161J-222	2.2K	1/6W	CARBON RES	
	R064	QRD161J-222	2.2K	1/6W	CARBON RES	
	R065	QRD161J-222	2.2K	1/6W	CARBON RES	
	R066	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
	R067	QRD14CJ-331SX	330	1/4W	UNF.CARBON	BS
	R067	QRD14CJ-331SX	330	1/4W	UNF.CARBON	EF
	R067	QRD14CJ-331SX	330	1/4W	UNF.CARBON	EN
	R067	QRD14CJ-331SX	330	1/4W	UNF.CARBON	G
	R067	QRD14CJ-331SX	330	1/4W	UNF.CARBON	GI
⚠	R067	QRZ0077-821	820	1/4W	FUSIBLE RE	A
⚠	R067	QRZ0077-821	820	1/4W	FUSIBLE RE	U
⚠	R067	QRZ0077-821	820	1/4W	FUSIBLE RE	UT
	R068	QRD14CJ-331SX	330	1/4W	UNF.CARBON	BS
	R068	QRD14CJ-331SX	330	1/4W	UNF.CARBON	EF
	R068	QRD14CJ-331SX	330	1/4W	UNF.CARBON	EN
	R068	QRD14CJ-331SX	330	1/4W	UNF.CARBON	G
	R068	QRD14CJ-331SX	330	1/4W	UNF.CARBON	GI
⚠	R068	QRZ0077-821	820	1/4W	FUSIBLE RE	A
⚠	R068	QRZ0077-821	820	1/4W	FUSIBLE RE	U
⚠	R068	QRZ0077-821	820	1/4W	FUSIBLE RE	UT
	R071	QRD161J-391	390	1/6W	CARBON RES	
⚠	R072	QRD14CJ-561SX	560	1/4W	UNF.CARBON	
⚠	R073	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R074	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R077	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R078	QRD125J-330	33	1/2W	UNF.CARBON	
	R081	QRD161J-102	1K	1/6W	CARBON RES	
	R082	QRD161J-183	18K	1/6W	CARBON RES	
	R083	QRD161J-123	12K	1/6W	CARBON RES	
⚠	R093	QRG022J-100A	10	2W	OXIDE META	
	R094	QRD161J-104	100K	1/6W	CARBON RES	
	R301	QRD161J-222	2.2K	1/6W	CARBON RES	
	R302	QRD161J-222	2.2K	1/6W	CARBON RES	
	R303	QRD161J-473	47K	1/6W	CARBON RES	
	R304	QRD161J-473	47K	1/6W	CARBON RES	
	R305	QRD161J-621	620	1/6W	CARBON RES	
	R306	QRD161J-621	620	1/6W	CARBON RES	
	R307	QRD161J-393	39K	1/6W	CARBON RES	
	R308	QRD161J-393	39K	1/6W	CARBON RES	
	R309	QRD161J-474	470K	1/6W	CARBON RES	
	R310	QRD161J-474	470K	1/6W	CARBON RES	
	R311	QRD161J-104	100K	1/6W	CARBON RES	
	R312	QRD161J-104	100K	1/6W	CARBON RES	
⚠	R313	QRZ0077-391	390	1/4W	FUSIBLE RE	
⚠	R314	QRZ0077-391	390	1/4W	FUSIBLE RE	
⚠	R321	QRZ0077-680	68	1/4W	FUSIBLE RE	
⚠	R322	QRZ0077-680	68	1/4W	FUSIBLE RE	
	R325	QRD161J-102	1K	1/6W	CARBON RES	
	R331	QRD161J-103	10K	1/6W	CARBON RES	
	R332	QRD161J-103	10K	1/6W	CARBON RES	
	R333	QRD161J-202	2K	1/6W	CARBON RES	
	R341	QRD161J-104	100K	1/6W	CARBON RES	
	R342	QRD161J-104	100K	1/6W	CARBON RES	
	R343	QRD161J-104	100K	1/6W	CARBON RES	
	R344	QRD161J-104	100K	1/6W	CARBON RES	
	R345	QRD161J-104	100K	1/6W	CARBON RES	
	R346	QRD161J-104	100K	1/6W	CARBON RES	
	R347	QRD161J-102	1K	1/6W	CARBON RES	
	R348	QRD161J-102	1K	1/6W	CARBON RES	
⚠	R349	QRZ0077-680	68	1/4W	FUSIBLE RE	
⚠	R350	QRZ0077-680	68	1/4W	FUSIBLE RE	
	R351	QRD161J-473	47K	1/6W	CARBON RES	
	R352	QRD161J-473	47K	1/6W	CARBON RES	
	R353	QRD161J-104	100K	1/6W	CARBON RES	
	R354	QRD161J-104	100K	1/6W	CARBON RES	
	R355	QRD161J-102	1K	1/6W	CARBON RES	
	R356	QRD161J-102	1K	1/6W	CARBON RES	
	R357	QRD161J-103	10K	1/6W	CARBON RES	
	R358	QRD161J-103	10K	1/6W	CARBON RES	
	R361	QRD161J-104	100K	1/6W	CARBON RES	
	R362	QRD161J-104	100K	1/6W	CARBON RES	
	R363	QRD167J-243	15K	1/6W	CARBON RES	
	R364	QRD167J-243	15K	1/6W	CARBON RES	
	R365	QRD161J-103	10K	1/6W	CARBON RES	
	R366	QRD161J-103	10K	1/6W	CARBON RES	
	R369	QRD161J-104	100K	1/6W	CARBON RES	
	R370	QRD161J-104	100K	1/6W	CARBON RES	
	R371	QRD161J-102	1K	1/6W	CARBON RES	
	R372	QRD161J-102	1K	1/6W	CARBON RES	
	R373	QRD161J-103	10K	1/6W	CARBON RES	
	R374	QRD161J-103	10K	1/6W	CARBON RES	
	R375	QRD161J-102	1K	1/6W	CARBON RES	
⚠	R377	QRZ0077-680	68	1/4W	FUSIBLE RE	
⚠	R378	QRZ0077-680	68	1/4W	FUSIBLE RE	
	R381	QRD161J-471	470	1/6W	CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R382	QRD161J-471	470	1/6W	CARBON RES	
	R385	QRD161J-471	470	1/6W	CARBON RES	
	R386	QRD161J-471	470	1/6W	CARBON RES	
	R387	QRD161J-471	470	1/6W	CARBON RES	
	R388	QRD161J-471	470	1/6W	CARBON RES	
	R389	QRD161J-471	470	1/6W	CARBON RES	
	R390	QRD161J-471	470	1/6W	CARBON RES	
	R391	QRD161J-471	470	1/6W	CARBON RES	
	R392	QRD161J-471	470	1/6W	CARBON RES	
	R393	QRD161J-471	470	1/6W	CARBON RES	
	R394	QRD161J-471	470	1/6W	CARBON RES	
	R395	QRD161J-471	470	1/6W	CARBON RES	
	R396	QRD161J-471	470	1/6W	CARBON RES	
	R397	QRD161J-471	470	1/6W	CARBON RES	
	R398	QRD161J-471	470	1/6W	CARBON RES	
	R491	QRD161J-221	220	1/6W	CARBON RES	
	R492	QRD161J-471	470	1/6W	CARBON RES	
	R523	QRD161J-472	4.7K	1/6W	CARBON RES	
	R524	QRD161J-472	4.7K	1/6W	CARBON RES	
	R525	QRD161J-122	1.2K	1/6W	CARBON RES	
	R526	QRD161J-122	1.2K	1/6W	CARBON RES	
	R533	QRD161J-203	20K	1/6W	CARBON RES	
	R534	QRD161J-203	20K	1/6W	CARBON RES	
	R535	QRD161J-362	3.6K	1/6W	CARBON RES	
	R536	QRD161J-362	3.6K	1/6W	CARBON RES	
	R551	QRD161J-222	2.2K	1/6W	CARBON RES	
	R552	QRD161J-104	100K	1/6W	CARBON RES	
	R553	QRD161J-202	2K	1/6W	CARBON RES	
	R554	QRD161J-202	2K	1/6W	CARBON RES	
	R555	QRD161J-103	10K	1/6W	CARBON RES	
⚠	R556	QRG022J-562A	5.6K	2W	OXIDE META	
	R557	QRD161J-104	100K	1/6W	CARBON RES	
	R558	QRD167J-751	750	1/6W	CARBON RES	
⚠	R561	QRD14CJ-221S	220	1/4W	UNF.CARBON	
	R562	QRD167J-751	750	1/6W	CARBON RES	
	R563	QRD161J-222	2.2K	1/6W	CARBON RES	
	R564	QRD161J-222	2.2K	1/6W	CARBON RES	
	R565	QRD161J-222	2.2K	1/6W	CARBON RES	
	R566	QRD161J-222	2.2K	1/6W	CARBON RES	
	R567	QRD161J-391	390	1/6W	CARBON RES	
	R568	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
⚠	R569	QRD14CJ-100SX	10	1/4W	UNF.CARBON	BS
⚠	R569	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EF
⚠	R569	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EN
⚠	R569	QRD14CJ-100SX	10	1/4W	UNF.CARBON	G
⚠	R569	QRD14CJ-100SX	10	1/4W	UNF.CARBON	GI
⚠	R569	QRZ0077-331	330	1/4W	FUSIBLE RE	A
⚠	R569	QRZ0077-331	330	1/4W	FUSIBLE RE	U
⚠	R569	QRZ0077-331	330	1/4W	FUSIBLE RE	UT
⚠	R570	QRD14CJ-100SX	10	1/4W	UNF.CARBON	BS
⚠	R570	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EF
⚠	R570	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EN
⚠	R570	QRD14CJ-100SX	10	1/4W	UNF.CARBON	G
⚠	R570	QRD14CJ-100SX	10	1/4W	UNF.CARBON	GI
⚠	R570	QRZ0077-331	330	1/4W	FUSIBLE RE	A
⚠	R570	QRZ0077-331	330	1/4W	FUSIBLE RE	U
⚠	R570	QRZ0077-331	330	1/4W	FUSIBLE RE	UT
⚠	R571	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R572	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R575	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R576	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R577	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R578	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R579	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R581	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R582	QRG022J-100A	10	2W	OXIDE META	
	R585	QRD161J-181	180	1/6W	CARBON RES	
	R586	QRD161J-181	180	1/6W	CARBON RES	
	R587	QRD161J-391	390	1/6W	CARBON RES	
	R588	QRD161J-391	390	1/6W	CARBON RES	
	R591	QRD161J-102	1K	1/6W	CARBON RES	
	R592	QRD161J-183	18K	1/6W	CARBON RES	
	R593	QRD161J-123	12K	1/6W	CARBON RES	
	R594	QRD161J-104	100K	1/6W	CARBON RES	
	R641	QRD161J-102	1K	1/6W	CARBON RES	
	R642	QRD161J-102	1K	1/6W	CARBON RES	
	R643	QRD161J-203	20K	1/6W	CARBON RES	
	R644	QRD161J-393	39K	1/6W	CARBON RES	
	R651	QRD161J-105	1M	1/6W	CARBON RES	
	R655	QRD161J-104	100K	1/6W	CARBON RES	
	R656	QRD161J-104	100K	1/6W	CARBON RES	
	R701	QRD161J-222	2.2K	1/6W	CARBON RES	
	R702	QRD161J-222	2.2K	1/6W	CARBON RES	
	R703	QRD161J-104	100K	1/6W	CARBON RES	
	R704	QRD161J-104	100K	1/6W	CARBON RES	
	R711	QRD167J-751	750	1/6W	CARBON RES	
	R712	QRD167J-751	750	1/6W	CARBON RES	
	R713	QRD161J-133Y	13K	1/6W	CARBON RES	
	R714	QRD161J-133Y	13K	1/6W	CARBON RES	
	R715	QRD161J-823	82K	1/6W	CARBON RES	
	R716	QRD161J-823	82K	1/6W	CARBON RES	
⚠	R737	QRG022J-562A	5.6K	2W	OXIDE META	
⚠	R739	QRD14CJ-100SX	10	1/4W	UNF.CARBON	BS
⚠	R739	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EF
⚠	R739	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EN

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R739	QRD14CJ-100SX	10	1/4W	UNF.CARBON	G
⚠	R739	QRD14CJ-100SX	10	1/4W	UNF.CARBON	GI
⚠	R739	QRD14CJ-221S	220	1/4W	UNF.CARBON	A
⚠	R739	QRD14CJ-221S	220	1/4W	UNF.CARBON	U
⚠	R739	QRD14CJ-221S	220	1/4W	UNF.CARBON	UT
⚠	R740	QRD14CJ-100SX	10	1/4W	UNF.CARBON	BS
⚠	R740	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EF
⚠	R740	QRD14CJ-100SX	10	1/4W	UNF.CARBON	EN
⚠	R740	QRD14CJ-100SX	10	1/4W	UNF.CARBON	G
⚠	R740	QRD14CJ-100SX	10	1/4W	UNF.CARBON	GI
⚠	R740	QRD14CJ-221S	220	1/4W	UNF.CARBON	A
⚠	R740	QRD14CJ-221S	220	1/4W	UNF.CARBON	U
⚠	R740	QRD14CJ-221S	220	1/4W	UNF.CARBON	UT
	R743	QRD167J-152	1.5K	1/6W	CARBON RES	
	R744	QRD167J-152	1.5K	1/6W	CARBON RES	
	R745	QRD161J-391	390	1/6W	CARBON RES	
	R746	QRD161J-391	390	1/6W	CARBON RES	
	R747	QRD161J-102	1K	1/6W	CARBON RES	
	R748	QRD161J-102	1K	1/6W	CARBON RES	
	R749	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
	R750	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
⚠	R751	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R752	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R753	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R754	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R755	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R756	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R757	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R758	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R759	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R760	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R765	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R766	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R767	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R768	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R769	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R770	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R771	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R772	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R773	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R774	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R775	QRG022J-100A	10	2W	OXIDE META	
⚠	R776	QRG022J-100A	10	2W	OXIDE META	
	R781	QRD161J-181	180	1/6W	CARBON RES	
	R782	QRD161J-181	180	1/6W	CARBON RES	
	R783	QRD161J-181	180	1/6W	CARBON RES	
	R784	QRD161J-181	180	1/6W	CARBON RES	
	R785	QRD161J-391	390	1/6W	CARBON RES	A
	R785	QRD161J-391	390	1/6W	CARBON RES	U
	R785	QRD161J-391	390	1/6W	CARBON RES	UT
	R785	QRD167J-161	160	1/6W	CARBON RES	BS
	R785	QRD167J-161	160	1/6W	CARBON RES	EF
	R785	QRD167J-161	160	1/6W	CARBON RES	EN
	R785	QRD167J-161	160	1/6W	CARBON RES	G
	R785	QRD167J-161	160	1/6W	CARBON RES	GI
	R786	QRD161J-391	390	1/6W	CARBON RES	A
	R786	QRD161J-391	390	1/6W	CARBON RES	U
	R786	QRD161J-391	390	1/6W	CARBON RES	UT
	R786	QRD167J-161	160	1/6W	CARBON RES	BS
	R786	QRD167J-161	160	1/6W	CARBON RES	EF
	R786	QRD167J-161	160	1/6W	CARBON RES	EN
	R786	QRD167J-161	160	1/6W	CARBON RES	G
	R786	QRD167J-161	160	1/6W	CARBON RES	GI
	R787	QRD161J-391	390	1/6W	CARBON RES	A
	R787	QRD161J-391	390	1/6W	CARBON RES	U
	R787	QRD161J-391	390	1/6W	CARBON RES	UT
	R787	QRD167J-161	160	1/6W	CARBON RES	BS
	R787	QRD167J-161	160	1/6W	CARBON RES	EF
	R787	QRD167J-161	160	1/6W	CARBON RES	EN
	R787	QRD167J-161	160	1/6W	CARBON RES	G
	R787	QRD167J-161	160	1/6W	CARBON RES	GI
	R788	QRD161J-391	390	1/6W	CARBON RES	A
	R788	QRD161J-391	390	1/6W	CARBON RES	U
	R788	QRD161J-391	390	1/6W	CARBON RES	UT
	R788	QRD167J-161	160	1/6W	CARBON RES	BS
	R788	QRD167J-161	160	1/6W	CARBON RES	EF
	R788	QRD167J-161	160	1/6W	CARBON RES	EN
	R788	QRD167J-161	160	1/6W	CARBON RES	G
	R788	QRD167J-161	160	1/6W	CARBON RES	GI
	R821	QRZ0077-220X	22	1/4W	FUSIBLE RE	
	R822	QRZ0077-220X	22	1/4W	FUSIBLE RE	
⚠	R823	QRD14CJ-332SX	3.3K	1/4W	UNF.CARBON	
⚠	R831	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R832	QRD14CJ-122SX	1.2K	1/4W	UNF.CARBON	
⚠	R841	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R842	QRD14CJ-122SX	1.2K	1/4W	UNF.CARBON	
⚠	R851	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R852	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R853	QRD143J-472S	4.7K	1/4W	CARBON RES	
	R854	QRD14CJ-822S	8.2K	1/4W	UNF.CARBON	
⚠	R861	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R862	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R863	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R871	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R872	QRD14CJ-332SX	3.3K	1/4W	UNF.CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R873	QRD14CJ-2R2SX	2.2	1/4W	UNF.CARBON	
⚠	R881	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R882	QRD143J-472S	4.7K	1/4W	CARBON RES	
⚠	R883	QRD14CJ-220S	22	1/4W	UNF.CARBON	
⚠	R891	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
	R892	QRD14CJ-102SX	1K	1/4W	UNF.CARBON	
⚠	R893	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
	R901	QRD161J-102	1K	1/6W	CARBON RES	
	R902	QRD161J-102	1K	1/6W	CARBON RES	
	R903	QRD167J-153	15K	1/6W	CARBON RES	
	R904	QRD167J-153	15K	1/6W	CARBON RES	
	R905	QRD161J-123	12K	1/6W	CARBON RES	
	R906	QRD161J-123	12K	1/6W	CARBON RES	
	R909	QRD161J-104	100K	1/6W	CARBON RES	
	R910	QRD161J-823	82K	1/6W	CARBON RES	
	R911	QRD167J-332	3.3K	1/6W	CARBON RES	
	R912	QRD161J-473	47K	1/6W	CARBON RES	
	R913	QRD161J-103	10K	1/6W	CARBON RES	
	R915	QRD161J-823	82K	1/6W	CARBON RES	
	R916	QRD161J-563	56K	1/6W	CARBON RES	
	R917	QRD161J-683	68K	1/6W	CARBON RES	
	R918	QRD161J-392	3.9K	1/6W	CARBON RES	
	R919	QRD167J-562	5.6K	1/6W	CARBON RES	
	R920	QRD161J-224	220K	1/6W	CARBON RES	
⚠	R921	QRD14CJ-470SX	47	1/4W	UNF.CARBON	
⚠	R922	QRG022J-102AM	1K	2W	OXIDE META	
	R923	QRD161J-820	82	1/6W	CARBON RES	
	R924	QRD161J-820	82	1/6W	CARBON RES	
	R925	QRD167J-562	5.6K	1/6W	CARBON RES	
	R926	QRD167J-822	8.2K	1/6W	CARBON RES	
	R927	QRD161J-103	10K	1/6W	CARBON RES	
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	A
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R931	QRZ0077-100	10	1/4W	FUSIBLE RE	GI
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	A
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R932	QRZ0077-100	10	1/4W	FUSIBLE RE	GI
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	A
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R933	QRZ0077-100	10	1/4W	FUSIBLE RE	GI
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	A
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R934	QRZ0077-100	10	1/4W	FUSIBLE RE	GI
⚠	R951	QRD14CJ-470SX	47	1/4W	UNF.CARBON	
⚠	R952	QRG022J-102AF	1K	2W	OXIDE META	
	R953	QRD167J-560	56	1/6W	CARBON RES	
	R954	QRD167J-560	56	1/6W	CARBON RES	
⚠	R961	QRG022J-471A	470	2W	OXIDE META	
⚠	R962	QRG022J-471A	470	2W	OXIDE META	
	VR521	QVDB96C-E15CJ3	100K		VARIABLE R	
	VR531	QVDB96C-E15CJ3	100K		VARIABLE R	
	VR541	QVDA96W-E15DJ3	100K		VARIABLE R	
	VR741	QVPA601-501A	500		TRIMMER RE	
	VR742	QVPA601-501A	500		TRIMMER RE	

⚠ : SAFETY PARTS

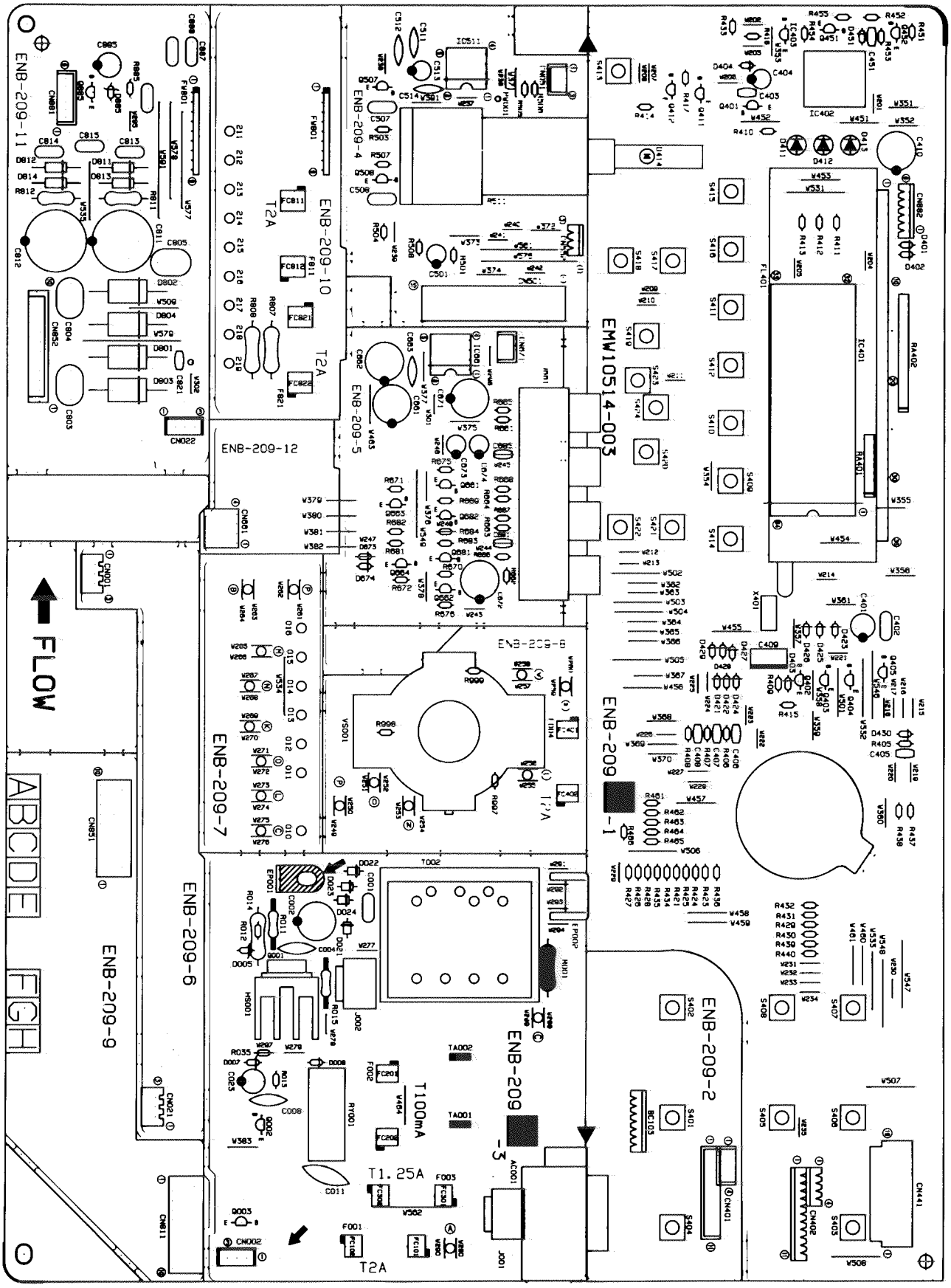
Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10515-003	CIR.BOARD	
	J301	EMN00TV-423AJ2	PIN JACK	
	J302	EMN00TV-423AJ2	PIN JACK	
	J303	EMN00TV-423AJ2	PIN JACK	
	J304	EMN00TV-616AJ2	PIN JACK	
	J491	QMS3501-021	PIN JACK	
	J961	QMS6022-V01	MICROPHONE	
	L051	EQL0011-R45J1	INDUCTOR	
	L581	EQL0011-R45J1	INDUCTOR	
	L771	EQL0001-1R0	INDUCTOR	
	L772	EQL0001-1R0	INDUCTOR	
	L971	EQL0011-R45J1	INDUCTOR	A
	L971	EQL0011-R45J1	INDUCTOR	BS
	L971	EQL0011-R45J1	INDUCTOR	EF
	L971	EQL0011-R45J1	INDUCTOR	EN
	L971	EQL0011-R45J1	INDUCTOR	G
	L971	EQL0011-R45J1	INDUCTOR	GI
	L981	EQL0011-R45J1	INDUCTOR	A
	L981	EQL0011-R45J1	INDUCTOR	BS
	L981	EQL0011-R45J1	INDUCTOR	EF
	L981	EQL0011-R45J1	INDUCTOR	EN
	L981	EQL0011-R45J1	INDUCTOR	G
	L981	EQL0011-R45J1	INDUCTOR	GI
	S901	QST4241-E05J2	PUSH SWITCH	
	X641	ECXP8R0-001Z	CRYSTAL	
	BC052	EWS293-0117	SOCKET WIRE	
	CN053	EMV7145-005Z	SOCKET ASSY	
	CN104	EMV5140-008	CONNECT TER	
	CN442	EMV7123-019	P.W.BOARD C	
	CN502	EMV5125-015	MALE CONNEC	
	CN551	EMV5109-003A	MALE CONNEC	
	CN662	EMV5125-004	CONNECT TER	
	CN701	EMV7163-015	CONNECT TER	
	CN815	EMV7145-004Z	SOCKET ASSY	
	CN816	EMV7145-004Z	SOCKET ASSY	
	CN817	EMV7145-003Z	SOCKET ASSY	
	CN851	EMV5125-010	MALE CONNEC	
	EP001	EMZ4002-001Z	EARTH PLATE	
	EP651	EMZ4002-001Z	EARTH PLATE	
	EP961	EMZ4002-001Z	EARTH PLATE	
	FW053	EWR35B-10LST	FLAT WIRE	
	FW813	EWR34B-20SST	FLAT WIRE	
	FW815	EWR38D-16LS	FLAT WIRE A	
	FW817	EWR33D-08LS	CORD	
	FW901	EWR36D-40SS	CORD	
	FW902	EWR34B-20SST	FLAT WIRE	
	RY901	ESK7D24-2120	RELAY	
	RY951	ESK7D24-2120	RELAY	
	ST901	EMB90TV-805G	SPEAKER TER	A
	ST901	EMB90TV-805G	SPEAKER TER	BS
	ST901	EMB90TV-805G	SPEAKER TER	EF
	ST901	EMB90TV-805G	SPEAKER TER	EN
	ST901	EMB90TV-805G	SPEAKER TER	G
	ST901	EMB90TV-805G	SPEAKER TER	GI
	ST901	EMB90TV-805G	SPEAKER TER	U
	ST901	EMB90TV-805G	SPEAKER TER	UT
	ST951	EMB90TV-602G	SPEAKER TER	U
	ST951	EMB90TV-602G	SPEAKER TER	UT
	ST951	EMB90TV-602G	SPEAKER TER	A
	ST951	EMB90TV-602G	SPEAKER TER	BS
	ST951	EMB90TV-602G	SPEAKER TER	EF
	ST951	EMB90TV-602G	SPEAKER TER	EN
	ST951	EMB90TV-602G	SPEAKER TER	G
	ST951	EMB90TV-602G	SPEAKER TER	GI
	TP741	QMV5005-004K	PLUG ASSY	

△ : SAFETY PARTS

■ ENB-209 □ Power Supply & System Control PC Board Ass'y

Note : ENB-209 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENB-209 [E]	EF EN GI G	Continental Europe Scandinavia Italy Germany
ENB-209 [F] BS	BS	the U.K.
ENB-209 [G]	A	Australia
ENB-209 [H]	U UT	Universal Type Taiwan

Transistors

△	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q001	2SD1266	SI.TRANSIST	MATSUSHITA	U
	Q001	2SD1266	SI.TRANSIST	MATSUSHITA	UT
	Q002	2SC2235(O,Y)	SI.TRANSIST	TOSHIBA	
	Q003	DTC114YS	DIGITAL TRA	ROHM	
	Q401	DTC114YS	DIGITAL TRA	ROHM	
	Q402	DTC114YS	DIGITAL TRA	ROHM	
	Q403	DTC114YS	DIGITAL TRA	ROHM	
	Q404	DTC114YS	DIGITAL TRA	ROHM	
	Q405	DTC114YS	DIGITAL TRA	ROHM	
	Q411	DTC114YS	DIGITAL TRA	ROHM	
	Q412	DTC114YS	DIGITAL TRA	ROHM	
	Q451	2SC1740S(R,S)	SI.TRANSIST	ROHM	
	Q452	2SC1740S(R,S)	SI.TRANSIST	ROHM	
	Q507	2SD2144S(VW)	SI.TRANSIST	ROHM	
	Q508	2SD2144S(VW)	SI.TRANSIST	ROHM	
	Q661	2SC458(C,D)	SI.TRANSIST	HITACHI	
	Q662	2SC458(C,D)	SI.TRANSIST	HITACHI	
	Q663	2SA933S(RS)	SI.TRANSIST		
	Q664	2SA933S(RS)	SI.TRANSIST		
	Q681	DTC143ESTP	SILICON		
	Q885	2SC2240(GR,BL)	SI.TRANSIST	TOSHIBA	

△ : SAFETY PARTS

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC401	MN171202J5Y1	I.C(MICRO-C	MATSUSHITA	
	IC402	SPS-420-1	INFRARED DE	SANYO	
	IC403	MN1281(P,Q)	I.C(DIGI-MO	MATSUSHITA	
	IC511	LB1639-CV	I.C(DIGI-OT	SANYO	
	IC661	NJM2246D	I.C(MONO-AN	DAINICHI	

△ : SAFETY PARTS

Diodes

△	ITEM	PART NUMBER	DESCRIPTION		AREA
	D005	MTZ12JC	ZENER DIODE	ROHM	U
	D005	MTZ12JC	ZENER DIODE	ROHM	UT
	D007	MTZ6.2JC	ZENER DIODE	ROHM	
	D008	MTZ12JC	ZENER DIODE	ROHM	A
	D008	1SS133	SI.DIODE	ROHM	BS
	D008	1SS133	SI.DIODE	ROHM	EF
	D008	1SS133	SI.DIODE	ROHM	EN
	D008	1SS133	SI.DIODE	ROHM	G
	D008	1SS133	SI.DIODE	ROHM	GI
	D008	1SS133	SI.DIODE	ROHM	U
	D008	1SS133	SI.DIODE	ROHM	UT
	D021	1SR139-200	SI.DIODE	ROHM	
	D022	1SR139-200	SI.DIODE	ROHM	
	D023	1SR139-200	SI.DIODE	ROHM	
	D024	1SR139-200	SI.DIODE	ROHM	
	D401	1SS133	SI.DIODE	ROHM	
	D402	1SS133	SI.DIODE	ROHM	
	D403	1SS133	SI.DIODE	ROHM	
	D404	1SS133	SI.DIODE	ROHM	
	D411	SLR-34DC50F124	L.E.D.		
	D412	SLR-34DC50F124	L.E.D.		
	D413	SLR-34DC50F124	L.E.D.		
	D414	SLA-380JT3F	L.E.D.		BS
	D414	SLA-380LT3F	L.E.D.	ROHM	A
	D414	SLA-380LT3F	L.E.D.	ROHM	EF
	D414	SLA-380LT3F	L.E.D.	ROHM	EN
	D414	SLA-380LT3F	L.E.D.	ROHM	G
	D414	SLA-380LT3F	L.E.D.	ROHM	GI
	D414	SLA-380LT3F	L.E.D.	ROHM	U
	D414	SLA-380LT3F	L.E.D.	ROHM	UT

△ : SAFETY PARTS

Diodes

△	ITEM	PART NUMBER	DESCRIPTION		AREA
	D421	1SS133	SI.DIODE	ROHM	
	D422	1SS133	SI.DIODE	ROHM	
	D423	1SS133	SI.DIODE	ROHM	
	D424	1SS133	SI.DIODE	ROHM	
	D425	1SS133	SI.DIODE	ROHM	
	D426	1SS133	SI.DIODE	ROHM	
	D427	1SS133	SI.DIODE	ROHM	U
	D427	1SS133	SI.DIODE	ROHM	UT
	D428	1SS133	SI.DIODE	ROHM	A
	D428	1SS133	SI.DIODE	ROHM	BS
	D428	1SS133	SI.DIODE	ROHM	EF
	D428	1SS133	SI.DIODE	ROHM	EN
	D428	1SS133	SI.DIODE	ROHM	G
	D428	1SS133	SI.DIODE	ROHM	GI
	D429	1SS133	SI.DIODE	ROHM	A
	D451	1SS133	SI.DIODE	ROHM	
	D801	30DF2SFC	SI.DIODE	NIHONINTER	BS
	D801	30DF2SFC	SI.DIODE	NIHONINTER	EF
	D801	30DF2SFC	SI.DIODE	NIHONINTER	EN
	D801	30DF2SFC	SI.DIODE	NIHONINTER	G
	D801	30DF2SFC	SI.DIODE	NIHONINTER	GI
	D801	30D2FC	GE.DIODE	NIHONINTER	A
	D801	30D2FC	GE.DIODE	NIHONINTER	U
	D801	30D2FC	GE.DIODE	NIHONINTER	UT
	D802	30DF2SFC	SI.DIODE	NIHONINTER	BS
	D802	30DF2SFC	SI.DIODE	NIHONINTER	EF
	D802	30DF2SFC	SI.DIODE	NIHONINTER	EN
	D802	30DF2SFC	SI.DIODE	NIHONINTER	G
	D802	30DF2SFC	SI.DIODE	NIHONINTER	GI
	D802	30D2FC	GE.DIODE	NIHONINTER	A
	D802	30D2FC	GE.DIODE	NIHONINTER	U
	D802	30D2FC	GE.DIODE	NIHONINTER	UT
	D803	30DF2SFC	SI.DIODE	NIHONINTER	BS
	D803	30DF2SFC	SI.DIODE	NIHONINTER	EF
	D803	30DF2SFC	SI.DIODE	NIHONINTER	EN
	D803	30DF2SFC	SI.DIODE	NIHONINTER	G
	D803	30DF2SFC	SI.DIODE	NIHONINTER	GI
	D803	30D2FC	GE.DIODE	NIHONINTER	A
	D803	30D2FC	GE.DIODE	NIHONINTER	U
	D803	30D2FC	GE.DIODE	NIHONINTER	UT
	D804	30DF2SFC	SI.DIODE	NIHONINTER	BS
	D804	30DF2SFC	SI.DIODE	NIHONINTER	EF
	D804	30DF2SFC	SI.DIODE	NIHONINTER	EN
	D804	30DF2SFC	SI.DIODE	NIHONINTER	G
	D804	30DF2SFC	SI.DIODE	NIHONINTER	GI
	D804	30D2FC	GE.DIODE	NIHONINTER	A
	D804	30D2FC	GE.DIODE	NIHONINTER	U
	D804	30D2FC	GE.DIODE	NIHONINTER	UT
	D811	10E2-FD	DIODE	NIHONINTER	
	D812	10E2-FD	DIODE	NIHONINTER	
	D813	10E2-FD	DIODE	NIHONINTER	
	D814	10E2-FD	DIODE	NIHONINTER	
	D885	MTZ5.6JC	ZENER DIODE	ROHM	

△ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QFN82AK-472	4700PF	100V	METAL.MYLA	
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	A
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	BS
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	EF
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	EN
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	G
	C002	QETB1EM-227	220MF	25V	AL E.CAPAC	GI
	C002	QETB1JM-227	220MF	63V	AL E.CAPAC	U
	C002	QETB1JM-227	220MF	63V	AL E.CAPAC	UT
	C004	QCF21HP-472	4700PF	50V	CER.CAPACI	U
	C004	QCF21HP-472	4700PF	50V	CER.CAPACI	UT
	C008	QCF21HP-472	4700PF	50V	CER.CAPACI	
△	C011	QCZ9019-472	4700PF		C.CAPACITO	A
△	C011	QCZ9019-472	4700PF		C.CAPACITO	EF
△	C011	QCZ9019-472	4700PF		C.CAPACITO	EN
△	C011	QCZ9019-472	4700PF		C.CAPACITO	G
△	C011	QCZ9019-472	4700PF		C.CAPACITO	GI
△	C011	QCZ9019-472	4700PF		C.CAPACITO	U
△	C011	QCZ9019-472	4700PF		C.CAPACITO	UT
△	C011	QCZ9019-472	4700PF		CERAMIC	BS
	C023	QETB1CM-476	47MF	16V	AL E.CAPAC	
	C401	QETB1AM-227	220MF	10V	E.CAPACITO	
	C402	QCZ0202-155	1.5MF	25V	CER.RESIST	
	C403	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C404	QER51HM-225G	2.2MF	50V	AL E.CAPAC	
	C409	QEADOHZ-479ZB	47000MF		E.CAPACITO	
	C410	QETB1VM-227	220MF	35V	AL E.CAPAC	
	C451	QCBB1HK-331Y	330PF	50V	CER.CAPACI	
	C501	QETB1HM-226E	22MF	50V	E.CAPACITO	
	C507	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	
	C508	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	
	C511	QCY21HK-331	330PF	50V	CER.CAPACI	
	C512	QCY21HK-331	330PF	50V	CER.CAPACI	
	C513	QETB1AM-107	100MF	10V	AL E.CAPAC	
	C514	QCF21HP-473A	0.047MF	50V	CER.CAPACI	

△ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C661	QETB1VM-477E	470MF	35V	AL E.CAPAC	
	C662	QETB1VM-477E	470MF	35V	AL E.CAPAC	
	C663	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C671	QETB0JM-108N	1000MF	6.3V	E.CAPACITO	
	C672	QETB0JM-108N	1000MF	6.3V	E.CAPACITO	
	C673	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C674	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C681	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C685	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C803	QFN82CK-104	0.1MF	160V	METAL.MYLA	
	C804	QFN82CK-104	0.1MF	160V	METAL.MYLA	
	C805	QFN82CK-104	0.1MF	160V	METAL.MYLA	
	C811	QETB1VM-228N	2200MF	35V	E.CAPACITO	
	C812	QETB1VM-228N	2200MF	35V	E.CAPACITO	
	C813	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C814	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C815	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C821	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C885	QETB1EM-107	100MF	25V	AL E.CAPAC	
	C887	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C888	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R011	QRZ0076-3R3	3.3	1/4W	FUSIBLE RE	U
⚠	R011	QRZ0076-3R3	3.3	1/4W	FUSIBLE RE	UT
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	A
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	BS
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	EF
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	EN
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	G
	R011	QRZ0077-220X	22	1/4W	FUSIBLE RE	GI
⚠	R012	QRV144F-1502	15K	1/4W	CONST.META	U
⚠	R012	QRV144F-1502	15K	1/4W	CONST.META	UT
	R013	QRD161J-821	820	1/6W	CARBON RES	U
	R013	QRD161J-821	820	1/6W	CARBON RES	UT
⚠	R013	QRV144F-8200		1/4W	CONST.META	A
⚠	R013	QRV144F-8200		1/4W	CONST.META	EF
⚠	R013	QRV144F-8200		1/4W	CONST.META	EN
⚠	R013	QRV144F-8200		1/4W	CONST.META	G
⚠	R013	QRV144F-8200		1/4W	CONST.META	GI
⚠	R013	QRV144F-9100		1/4W	M.F.RESIST	BS
⚠	R014	QRG012J-332A	3.3K	1W	OXIDE META	U
⚠	R014	QRG012J-332A	3.3K	1W	OXIDE META	UT
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	A
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	BS
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	EF
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	EN
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	G
	R015	QRD14CJ-110SX	11	1/4W	UNF.CARBON	GI
	R035	QRD167J-200	20	1/6W	CARBON RES	A
	R035	QRD167J-200	20	1/6W	CARBON RES	BS
	R405	QRD161J-104	100K	1/6W	CARBON RES	
	R406	QRD161J-104	100K	1/6W	CARBON RES	
	R407	QRD161J-104	100K	1/6W	CARBON RES	
	R408	QRD161J-104	100K	1/6W	CARBON RES	
	R409	QRD161J-331	330	1/6W	CARBON RES	
	R410	QRD167J-223	22K	1/6W	CARBON RES	
	R411	QRD161J-221	220	1/6W	CARBON RES	
	R412	QRD161J-221	220	1/6W	CARBON RES	
	R413	QRD161J-221	220	1/6W	CARBON RES	
	R414	QRD161J-221	220	1/6W	CARBON RES	BS
	R414	QRD167J-431	430	1/6W	CARBON RES	A
	R414	QRD167J-431	430	1/6W	CARBON RES	EF
	R414	QRD167J-431	430	1/6W	CARBON RES	EN
	R414	QRD167J-431	430	1/6W	CARBON RES	G
	R414	QRD167J-431	430	1/6W	CARBON RES	GI
	R414	QRD167J-431	430	1/6W	CARBON RES	U
	R414	QRD167J-431	430	1/6W	CARBON RES	UT
	R415	QRD161J-220	22	1/6W	CARBON RES	
	R416	QRD161J-472	4.7K	1/6W	CARBON RES	
	R417	QRD161J-103	10K	1/6W	CARBON RES	
	R421	QRD161J-471	470	1/6W	CARBON RES	
	R423	QRD161J-221	220	1/6W	CARBON RES	
	R424	QRD161J-471	470	1/6W	CARBON RES	
	R425	QRD161J-471	470	1/6W	CARBON RES	
	R426	QRD161J-471	470	1/6W	CARBON RES	
	R427	QRD161J-471	470	1/6W	CARBON RES	
	R428	QRD161J-471	470	1/6W	CARBON RES	
	R429	QRD161J-471	470	1/6W	CARBON RES	
	R430	QRD161J-471	470	1/6W	CARBON RES	
	R431	QRD161J-471	470	1/6W	CARBON RES	
	R432	QRD161J-471	470	1/6W	CARBON RES	
	R433	QRD161J-471	470	1/6W	CARBON RES	
	R434	QRD161J-471	470	1/6W	CARBON RES	
	R435	QRD161J-471	470	1/6W	CARBON RES	
	R436	QRD161J-471	470	1/6W	CARBON RES	
	R437	QRD161J-471	470	1/6W	CARBON RES	
	R438	QRD161J-471	470	1/6W	CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R439	QRD161J-471	470	1/6W	CARBON RES	
	R440	QRD161J-471	470	1/6W	CARBON RES	
	R451	QRD161J-103	10K	1/6W	CARBON RES	
	R452	QRD161J-473	47K	1/6W	CARBON RES	
	R453	QRD167J-223	22K	1/6W	CARBON RES	
	R454	QRD161J-471	470	1/6W	CARBON RES	
	R455	QRD161J-103	10K	1/6W	CARBON RES	
	R501	QRD161J-202	2K	1/6W	CARBON RES	
	R503	QRD167J-223	22K	1/6W	CARBON RES	
	R504	QRD167J-223	22K	1/6W	CARBON RES	
	R505	QRD167J-223	22K	1/6W	CARBON RES	
	R506	QRD167J-223	22K	1/6W	CARBON RES	
	R507	QRD161J-222	2.2K	1/6W	CARBON RES	
	R508	QRD161J-222	2.2K	1/6W	CARBON RES	
	R511	QVDC94Z-E15EJ5	100K		VARIABLE R	
	R661	QRD161J-750	75	1/6W	CARBON RES	
	R662	QRD161J-750	75	1/6W	CARBON RES	
	R663	QRD161J-750	75	1/6W	CARBON RES	
	R664	QRD161J-750	75	1/6W	CARBON RES	
	R665	QRD161J-473	47K	1/6W	CARBON RES	
	R666	QRD161J-473	47K	1/6W	CARBON RES	
	R667	QRD161J-331	330	1/6W	CARBON RES	
	R668	QRD161J-331	330	1/6W	CARBON RES	
	R669	QRD167J-152	1.5K	1/6W	CARBON RES	
	R670	QRD167J-152	1.5K	1/6W	CARBON RES	
	R671	QRD167J-151	150	1/6W	CARBON RES	
	R672	QRD167J-151	150	1/6W	CARBON RES	
	R675	QRD161J-271	270	1/6W	CARBON RES	
	R676	QRD161J-271	270	1/6W	CARBON RES	
	R681	QRD161J-473	47K	1/6W	CARBON RES	
	R683	QRD167J-152	1.5K	1/6W	CARBON RES	
⚠	R807	QRX022J-2R2A	2.2	2W	METAL FILM	
⚠	R808	QRX022J-2R2A	2.2	2W	METAL FILM	
⚠	R811	QRX012J-2R2AM	2.2	1W	METAL FILM	
⚠	R812	QRX012J-2R2AM	2.2	1W	METAL FILM	
	R885	QRD161J-104	100K	1/6W	CARBON RES	
	R997	QRD161J-103	10K	1/6W	CARBON RES	U
	R997	QRD161J-103	10K	1/6W	CARBON RES	UT
	R998	QRD161J-103	10K	1/6W	CARBON RES	U
	R998	QRD161J-103	10K	1/6W	CARBON RES	UT
	R999	QRD161J-103	10K	1/6W	CARBON RES	U
	R999	QRD161J-103	10K	1/6W	CARBON RES	UT

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10514-003	PRINTED BOA	A
		EMW10514-003	PRINTED BOA	EF
		EMW10514-003	PRINTED BOA	EN
		EMW10514-003	PRINTED BOA	G
		EMW10514-003	PRINTED BOA	GI
		EMW10514-003	PRINTED BOA	U
		EMW10514-003	PRINTED BOA	UT
		EMW10514-003BS	PRINTED BOA	BS
		E67132-T4R0	FUSE LABEL	U
		E67132-T4R0	FUSE LABEL	UT
		QWE880-14RR	VINYL WIRE	U
		QWE880-14RR	VINYL WIRE	UT
		QWE881-20RR	VINYL WIRE	BS
		QWE881-20RR	VINYL WIRE	EF
		QWE881-20RR	VINYL WIRE	EN
		QWE881-20RR	VINYL WIRE	G
		QWE881-20RR	VINYL WIRE	GI
		QWE881-24RR	VINYL WIRE	A
		QWE881-24RR	VINYL WIRE	U
		QWE881-24RR	VINYL WIRE	UT
		QWE882-18RR	VINYL WIRE	U
		QWE882-18RR	VINYL WIRE	UT
		QWE883-16RR	VINYL WIRE	U
		QWE883-16RR	VINYL WIRE	UT
		QWE884-14RR	PIN WIRE	U
		QWE884-14RR	PIN WIRE	UT
		QWE886-18RR	VINYL WIRE	
		QWE888-14RR	PIN WIRE	U
		QWE888-14RR	PIN WIRE	UT
		QWE889-12RR	VINYL WIRE	U
		QWE889-12RR	VINYL WIRE	UT
		SBST3008CC	TAPPING SCR	U
		SBST3008CC	TAPPING SCR	UT
	J001	EMV5137-002	CONNECT TER	A
	J001	EMV5137-002	CONNECT TER	BS
	J001	EMV5137-002	CONNECT TER	EF
	J001	EMV5137-002	CONNECT TER	EN
	J001	EMV5137-002	CONNECT TER	G
	J001	EMV5137-002	CONNECT TER	GI
	J661	EMN00YV-406AJ1	PIN JACK	
	S401	ESP0001-023M	TACT SWITCH	
	S402	ESP0001-023M	TACT SWITCH	
	S403	ESP0001-023M	TACT SWITCH	
	S404	ESP0001-023M	TACT SWITCH	
	S405	ESP0001-023M	TACT SWITCH	

⚠ : SAFETY PARTS

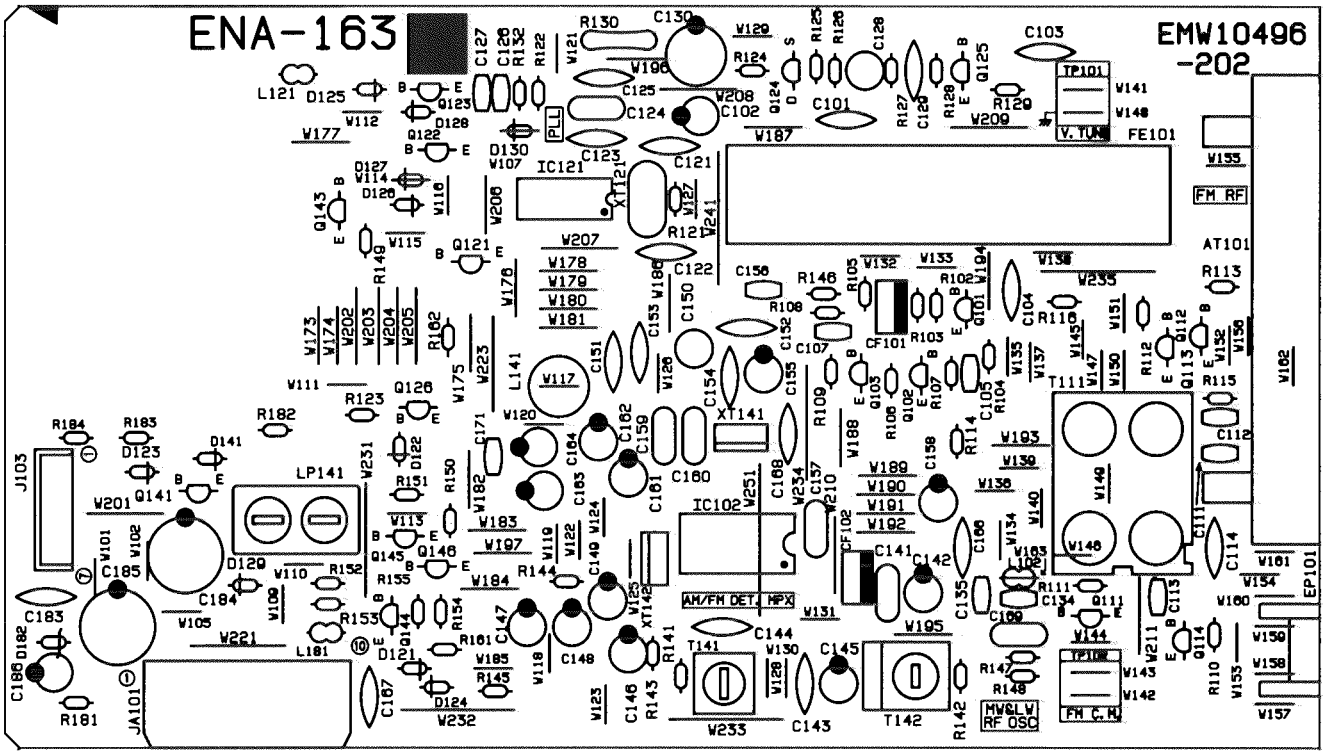
Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	S406	ESP0001-023M	TACT SWITCH	
	S407	ESP0001-023M	TACT SWITCH	
	S408	ESP0001-023M	TACT SWITCH	
	S409	ESP0001-023M	TACT SWITCH	
	S410	ESP0001-023M	TACT SWITCH	
	S411	ESP0001-023M	TACT SWITCH	
	S412	ESP0001-023M	TACT SWITCH	
	S413	ESP0001-023M	TACT SWITCH	
	S414	ESP0001-023M	TACT SWITCH	
	S415	ESP0001-023M	TACT SWITCH	
	S416	ESP0001-023M	TACT SWITCH	
	S417	ESP0001-023M	TACT SWITCH	
	S418	ESP0001-023M	TACT SWITCH	
	S419	ESP0001-023M	TACT SWITCH	
	S420	ESP0001-023M	TACT SWITCH	
	S421	ESP0001-023M	TACT SWITCH	
	S422	ESP0001-023M	TACT SWITCH	
	S423	ESP0001-023M	TACT SWITCH	
	S424	ESP0001-023M	TACT SWITCH	
△	T002	ETP1000-41EA	POWER TRASN	A
△	T002	ETP1000-41EA	POWER TRASN	EF
△	T002	ETP1000-41EA	POWER TRASN	EN
△	T002	ETP1000-41EA	POWER TRASN	G
△	T002	ETP1000-41EA	POWER TRASN	GI
△	T002	ETP1000-41EABS	POWER TRASN	BS
△	T002	ETP1000-41ZB	POWER TRASN	U
△	T002	ETP1000-41ZB	POWER TRASN	UT
	X401	ECXP6R0-001ZA	CRYSTAL	
△	AC001	QMCA002-E02S	AC OUTLET	U
△	AC001	QMCA002-E02S	AC OUTLET	UT
	BC103	EWS267-A420	SOCKET WIRE	
	CN001	VMC0178-003	CONNECT TER	
	CN002	VMC0177-003	CONNECT TER	
	CN021	VMC0178-003	CONNECT TER	
	CN022	VMC0177-003	CONNECT TER	
	CN051	EMV5109-003A	MALE CONNEC	
	CN401	EMV5109-011A	MALE CONNEC	
	CN402	EWS26B-A408J	SOCKET WIRE	
	CN441	EMV7123-019R	CONNECTOR	
	CN501	EMV7125-015R	P.W.BOARD C	
	CN552	EWS293-0130	SOCKET WIRE	
	CN661	EMV7125-004R	CONNECT TER	
	CN811	EMV7125-010R	MALE CONNEC	
	CN851	EMV7125-010R	MALE CONNEC	
	CN852	EMV5125-010	MALE CONNEC	
	CN881	EMV5109-006A	CONNECT TER	
	CN882	EWS266-A413	SOCKET WIRE	
	EP001	EMZ4002-001Z	EARTH PLATE	
	EP002	E70225-001	EARTH PLATE	
	FC101	VMZ0087-001Z	FUSE HOLDER	
	FC102	VMZ0087-001Z	FUSE HOLDER	
	FC201	VMZ0087-001Z	FUSE HOLDER	
	FC202	VMZ0087-001Z	FUSE HOLDER	
	FC301	VMZ0087-001Z	FUSE HOLDER	EF
	FC301	VMZ0087-001Z	FUSE HOLDER	EN
	FC301	VMZ0087-001Z	FUSE HOLDER	G
	FC301	VMZ0087-001Z	FUSE HOLDER	GI
	FC302	VMZ0087-001Z	FUSE HOLDER	EF
	FC302	VMZ0087-001Z	FUSE HOLDER	EN
	FC302	VMZ0087-001Z	FUSE HOLDER	G
	FC302	VMZ0087-001Z	FUSE HOLDER	GI
	FC401	VMZ0087-001Z	FUSE HOLDER	U
	FC401	VMZ0087-001Z	FUSE HOLDER	UT
	FC402	VMZ0087-001Z	FUSE HOLDER	U
	FC402	VMZ0087-001Z	FUSE HOLDER	UT
	FC811	VMZ0087-001Z	FUSE HOLDER	
	FC812	VMZ0087-001Z	FUSE HOLDER	
	FC821	VMZ0087-001Z	FUSE HOLDER	
	FC822	VMZ0087-001Z	FUSE HOLDER	
	FH001	E308270-002SM	FL HOLDER	
	FH002	E308270-002SM	FL HOLDER	
	FL401	ELU0001-144	FLUORESCENT	
	FW801	EWR39D-08SS	FLAT WIRE A	
	HS001	E70945-H40B	HEAT SINK	U
	HS001	E70945-H40B	HEAT SINK	UT
	RY001	ESK1D12-118J1	RELAY	A
	RY001	ESK1D12-118J1	RELAY	EF
	RY001	ESK1D12-118J1	RELAY	EN
	RY001	ESK1D12-118J1	RELAY	G
	RY001	ESK1D12-118J1	RELAY	GI
	RY001	ESK1D12-118J1	RELAY	U
	RY001	ESK1D12-118J1	RELAY	UT
	RY001	ESK1D12-118J1BS	RELAY	BS
	SP001	E3400-444	FELT SPACER	
	SP002	E3400-444	FELT SPACER	
	TA001	EMZ4001-001	TAB	
	TA002	EMZ4001-001	TAB	
△	VS001	QSR0085-018	SELECT SWIT	U
△	VS001	QSR0085-018	SELECT SWIT	UT

△ : SAFETY PARTS

■ ENA-163 □ Tuner PC Board Ass'y

Note : ENA-163 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENA-163 [B]	U	Universal Type
	UT	Taiwan
ENA-163 [C]	A	Australia
ENA-163 [D]	BS	the U.K.
	EF	Continental Europe
	EN	Scandinavia
	G	Germany
	GI	Italy

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q101	2SC461	SI.TRANSIST	
	Q102	2SC535	SI.TRANSIST HITACHI	
	Q103	2SC461	SI.TRANSIST	
	Q111	2SD2144S(VW)	SI.TRANSIST ROHM	BS
	Q111	2SD2144S(VW)	SI.TRANSIST ROHM	EF
	Q111	2SD2144S(VW)	SI.TRANSIST ROHM	EN
	Q111	2SD2144S(VW)	SI.TRANSIST ROHM	G
	Q111	2SD2144S(VW)	SI.TRANSIST ROHM	GI
	Q112	2SD2144S(VW)	SI.TRANSIST ROHM	BS
	Q112	2SD2144S(VW)	SI.TRANSIST ROHM	EF
	Q112	2SD2144S(VW)	SI.TRANSIST ROHM	EN
	Q112	2SD2144S(VW)	SI.TRANSIST ROHM	G
	Q112	2SD2144S(VW)	SI.TRANSIST ROHM	GI
	Q113	2SC1740S(R,S)	SI.TRANSIST ROHM	BS
	Q113	2SC1740S(R,S)	SI.TRANSIST ROHM	EF
	Q113	2SC1740S(R,S)	SI.TRANSIST ROHM	EN
	Q113	2SC1740S(R,S)	SI.TRANSIST ROHM	G
	Q113	2SC1740S(R,S)	SI.TRANSIST ROHM	GI
	Q114	2SD2144S(VW)	SI.TRANSIST ROHM	BS
	Q114	2SD2144S(VW)	SI.TRANSIST ROHM	EF
	Q114	2SD2144S(VW)	SI.TRANSIST ROHM	EN
	Q114	2SD2144S(VW)	SI.TRANSIST ROHM	G
	Q114	2SD2144S(VW)	SI.TRANSIST ROHM	GI
	Q121	DTA144ES	DIGITAL TRA ROHM	
	Q122	DTA144ES	DIGITAL TRA ROHM	

△ : SAFETY PARTS

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q123	DTA144ES	DIGITAL TRA ROHM	BS
	Q123	DTA144ES	DIGITAL TRA ROHM	EF
	Q123	DTA144ES	DIGITAL TRA ROHM	EN
	Q123	DTA144ES	DIGITAL TRA ROHM	G
	Q123	DTA144ES	DIGITAL TRA ROHM	GI
	Q124	2SK301(P,Q)	F.E.T.	
	Q125	2SC458(C,D)	SI.TRANSIST HITACHI	
	Q126	DTC114ES	DIGITAL TRA ROHM	
	Q141	DTC114ES	DIGITAL TRA ROHM	
	Q143	DTC114ES	DIGITAL TRA ROHM	

△ : SAFETY PARTS

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC102	LA1836M	I.C(MONO-AN SANYO	
	IC121	LC7218JMX	I.C(DIGI-MO SANYO	

△ : SAFETY PARTS

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	D121	1SS133	SI.DIODE ROHM	
	D122	1SS133	SI.DIODE ROHM	
	D123	1SS133	SI.DIODE ROHM	
	D124	1SS133	SI.DIODE ROHM	
	D125	1SS133	SI.DIODE ROHM	BS
	D125	1SS133	SI.DIODE ROHM	EF
	D125	1SS133	SI.DIODE ROHM	EN
	D125	1SS133	SI.DIODE ROHM	G
	D125	1SS133	SI.DIODE ROHM	GI
	D126	1SS133	SI.DIODE ROHM	
	D127	1SS133	SI.DIODE ROHM	BS
	D127	1SS133	SI.DIODE ROHM	EF
	D127	1SS133	SI.DIODE ROHM	EN
	D127	1SS133	SI.DIODE ROHM	G
	D127	1SS133	SI.DIODE ROHM	GI
	D128	1SS133	SI.DIODE ROHM	BS
	D128	1SS133	SI.DIODE ROHM	EF
	D128	1SS133	SI.DIODE ROHM	EN
	D128	1SS133	SI.DIODE ROHM	G
	D128	1SS133	SI.DIODE ROHM	GI
	D129	1SS133	SI.DIODE ROHM	
	D130	1SS133	SI.DIODE ROHM	
	D141	1SS133	SI.DIODE ROHM	
	D182	MTZ5.1JC	ZENER DIODE ROHM	

△ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCF21HP-103A	0.01MF	50V	CER.CAPACI	
	C102	QET31EM-476	47MF	25V	AL E.CAPAC	BS
	C102	QET31EM-476	47MF	25V	AL E.CAPAC	EF
	C102	QET31EM-476	47MF	25V	AL E.CAPAC	EN
	C102	QET31EM-476	47MF	25V	AL E.CAPAC	G
	C102	QET31EM-476	47MF	25V	AL E.CAPAC	GI
	C103	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C104	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C105	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C107	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C111	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C112	QCT30CH-120Y	12PF	50V	CER.CAPACI	
	C113	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	BS
	C113	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	EF
	C113	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	EN
	C113	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	G
	C113	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	GI
	C114	QCC21EM-473	0.047MF	25V	CER.CAPACI	
	C121	QCS21HJ-180A	18PF	50V	CER.CAPACI	
	C122	QCS21HJ-180A	18PF	50V	CER.CAPACI	
	C123	QCC21EM-473	0.047MF	25V	CER.CAPACI	
	C124	QCZ0202-155	1.5MF	25V	CER.RESIST	
	C125	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C126	QCBB1HK-101Y	100PF	50V	CER.CAPACI	
	C127	QCBB1HK-101Y	100PF	50V	CER.CAPACI	
	C128	QENB1HM-474	0.47MF	50V	NP E.CAPAC	
	C129	QCY31HK-102Z	1000PF	50V	CER.CAPACI	
	C130	QETB1CM-227	220MF	16V	AL E.CAPAC	
	C134	QCSB1HK-5R6Y	5.6PF	50V	CER.CAPACI	BS
	C134	QCSB1HK-5R6Y	5.6PF	50V	CER.CAPACI	EF
	C134	QCSB1HK-5R6Y	5.6PF	50V	CER.CAPACI	EN
	C134	QCSB1HK-5R6Y	5.6PF	50V	CER.CAPACI	G
	C134	QCSB1HK-5R6Y	5.6PF	50V	CER.CAPACI	GI
	C135	QCSB1HJ-150Y	15PF	50V	CER.CAPACI	BS
	C135	QCSB1HJ-150Y	15PF	50V	CER.CAPACI	EF
	C135	QCSB1HJ-150Y	15PF	50V	CER.CAPACI	EN
	C135	QCSB1HJ-150Y	15PF	50V	CER.CAPACI	G
	C135	QCSB1HJ-150Y	15PF	50V	CER.CAPACI	GI
	C141	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	
	C142	QET31HM-106	10MF	50V	E.CAPACITO	
	C143	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C144	QCC21EM-473	0.047MF	25V	CER.CAPACI	
	C145	QETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C146	QETB1HM-106	10MF	50V	E.CAPACITO	
	C147	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C148	QETB1HM-474	0.47MF	50V	ELECTRO	
	C149	QETB1HM-105	1MF	50V	AL E.CAPAC	
	C150	QETC1HM-225ZN	2.2MF	50V	AL E.CAPAC	
	C151	QCS21HJ-181A	180PF	50V	CER.CAPACI	BS
	C151	QCS21HJ-181A	180PF	50V	CER.CAPACI	EF
	C151	QCS21HJ-181A	180PF	50V	CER.CAPACI	EN
	C151	QCS21HJ-181A	180PF	50V	CER.CAPACI	G
	C151	QCS21HJ-181A	180PF	50V	CER.CAPACI	GI
	C152	QCS21HJ-181A	180PF	50V	CER.CAPACI	BS
	C152	QCS21HJ-181A	180PF	50V	CER.CAPACI	EF
	C152	QCS21HJ-181A	180PF	50V	CER.CAPACI	EN
	C152	QCS21HJ-181A	180PF	50V	CER.CAPACI	G
	C152	QCS21HJ-181A	180PF	50V	CER.CAPACI	GI
	C153	QCY31HK-102Z	1000PF	50V	CER.CAPACI	A
	C153	QCY31HK-102Z	1000PF	50V	CER.CAPACI	U
	C153	QCY31HK-102Z	1000PF	50V	CER.CAPACI	UT
	C153	QCY31HK-821Z	820PF	50V	CER.CAPACI	BS
	C153	QCY31HK-821Z	820PF	50V	CER.CAPACI	EF
	C153	QCY31HK-821Z	820PF	50V	CER.CAPACI	EN
	C153	QCY31HK-821Z	820PF	50V	CER.CAPACI	G
	C153	QCY31HK-821Z	820PF	50V	CER.CAPACI	GI
	C154	QCY31HK-472Z	4700PF	50V	CER.CAPACI	
	C155	QETB1EM-476	47MF	25V	AL E.CAPAC	
	C156	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C157	QCZ0202-155	1.5MF	25V	CER.RESIST	
	C158	QET31HM-106	10MF	50V	E.CAPACITO	
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	A
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	BS
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	EF
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	EN
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	G
	C159	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	GI
	C159	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	U
	C159	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	UT
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	A
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	BS
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	EF
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	EN
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	G
	C160	QFLB1HJ-273	0.027MF	50V	MYLAR CAPA	GI
	C160	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	U
	C160	QFLB1HJ-333	0.033MF	50V	MYLAR CAPA	UT
	C161	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C162	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C163	QETB1HM-225	2.2MF	50V	AL E.CAPAC	
	C164	QET31HM-225	2.2MF	50V	AL E.CAPAC	
	C166	QCC21EM-473	0.047MF	25V	CER.CAPACI	
	C168	QCC21EM-473	0.047MF	25V	CER.CAPACI	
	C169	QFV81HJ-274	0.27MF	50V	T.FILM CAP	
	C171	QCBB1HK-102Y	1000PF	50V	CER.CAPACI	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C172	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C183	QCF21HP-223A	0.022MF	50V	CER.CAPACI	
	C184	QETB1CM-227	220MF	16V	AL E.CAPAC	
	C185	QETB1CM-477M	470MF	16V	E.CAPACITO	
	C186	QETB1HM-475E	4.7MF	50V	E.CAPACITO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R102	QRD167J-332	3.3K	1/6W	CARBON RES	
	R103	QRD161J-221	220	1/6W	CARBON RES	
	R104	QRD167J-272	2.7K	1/6W	CARBON RES	
	R105	QRD161J-391	390	1/6W	CARBON RES	
	R106	QRD161J-102	1K	1/6W	CARBON RES	
	R107	QRD161J-681	680	1/6W	CARBON RES	
	R108	QRD167J-332	3.3K	1/6W	CARBON RES	
	R109	QRD161J-221	220	1/6W	CARBON RES	
	R110	QRD161J-472	4.7K	1/6W	CARBON RES	BS
	R110	QRD161J-472	4.7K	1/6W	CARBON RES	EF
	R110	QRD161J-472	4.7K	1/6W	CARBON RES	EN
	R110	QRD161J-472	4.7K	1/6W	CARBON RES	G
	R110	QRD161J-472	4.7K	1/6W	CARBON RES	GI
	R111	QRD161J-472	4.7K	1/6W	CARBON RES	BS
	R111	QRD161J-472	4.7K	1/6W	CARBON RES	EF
	R111	QRD161J-472	4.7K	1/6W	CARBON RES	EN
	R111	QRD161J-472	4.7K	1/6W	CARBON RES	G
	R111	QRD161J-472	4.7K	1/6W	CARBON RES	GI
	R112	QRD161J-472	4.7K	1/6W	CARBON RES	BS
	R112	QRD161J-472	4.7K	1/6W	CARBON RES	EF
	R112	QRD161J-472	4.7K	1/6W	CARBON RES	EN
	R112	QRD161J-472	4.7K	1/6W	CARBON RES	G
	R112	QRD161J-472	4.7K	1/6W	CARBON RES	GI
	R113	QRD161J-103	10K	1/6W	CARBON RES	BS
	R113	QRD161J-103	10K	1/6W	CARBON RES	EF
	R113	QRD161J-103	10K	1/6W	CARBON RES	EN
	R113	QRD161J-103	10K	1/6W	CARBON RES	G
	R113	QRD161J-103	10K	1/6W	CARBON RES	GI
	R114	QRD161J-103	10K	1/6W	CARBON RES	BS
	R114	QRD161J-103	10K	1/6W	CARBON RES	EF
	R114	QRD161J-103	10K	1/6W	CARBON RES	EN
	R114	QRD161J-103	10K	1/6W	CARBON RES	G
	R114	QRD161J-103	10K	1/6W	CARBON RES	GI
	R115	QRD161J-104	100K	1/6W	CARBON RES	
	R116	QRD161J-222	2.2K	1/6W	CARBON RES	
	R121	QRD161J-473	47K	1/6W	CARBON RES	
	R122	QRD161J-472	4.7K	1/6W	CARBON RES	
	R123	QRD167J-562	5.6K	1/6W	CARBON RES	
	R124	QRD161J-222	2.2K	1/6W	CARBON RES	
	R125	QRD161J-222	2.2K	1/6W	CARBON RES	
	R126	QRD161J-181	180	1/6W	CARBON RES	
	R127	QRD167J-822	8.2K	1/6W	CARBON RES	
	R128	QRD161J-472	4.7K	1/6W	CARBON RES	
	R129	QRD161J-222	2.2K	1/6W	CARBON RES	
⚠	R130	QRZ0077-680	68	1/4W	FUSIBLE RE	
	R132	QRD161J-102	1K	1/6W	CARBON RES	
	R141	QRD161J-392	3.9K	1/6W	CARBON RES	
	R142	QRD161J-103	10K	1/6W	CARBON RES	
	R143	QRD161J-103	10K	1/6W	CARBON RES	
	R144	QRD167J-332	3.3K	1/6W	CARBON RES	
	R145	QRD161J-103	10K	1/6W	CARBON RES	
	R146	QRD161J-222	2.2K	1/6W	CARBON RES	
	R147	QRD161J-473	47K	1/6W	CARBON RES	
	R148	QRD161J-561	560	1/6W	CARBON RES	
	R149	QRD161J-103	10K	1/6W	CARBON RES	A
	R149	QRD161J-103	10K	1/6W	CARBON RES	BS
	R149	QRD161J-103	10K	1/6W	CARBON RES	EF
	R149	QRD161J-103	10K	1/6W	CARBON RES	EN
	R149	QRD161J-103	10K	1/6W	CARBON RES	G
	R149	QRD161J-103	10K	1/6W	CARBON RES	GI
	R149	QRD167J-223	22K	1/6W	CARBON RES	U
	R149	QRD167J-223	22K	1/6W	CARBON RES	UT
	R150	QRD167J-332	3.3K	1/6W	CARBON RES	
	R151	QRD167J-332	3.3K	1/6W	CARBON RES	
	R152	QRD167J-332	3.3K	1/6W	CARBON RES	U
	R152	QRD167J-332	3.3K	1/6W	CARBON RES	UT
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	A
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	BS
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	EF
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	EN
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	G
	R152	QRD167J-822	8.2K	1/6W	CARBON RES	GI
	R153	QRD167J-332	3.3K	1/6W	CARBON RES	U
	R153	QRD167J-332	3.3K	1/6W	CARBON RES	UT
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	A
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	BS
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	EF
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	EN
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	G
	R153	QRD167J-822	8.2K	1/6W	CARBON RES	GI
	R161	QRD161J-473	47K	1/6W	CARBON RES	
	R162	QRD161J-222	2.2K	1/6W	CARBON RES	
	R181	QRD161J-222	2.2K	1/6W	CARBON RES	
	R182	QRD161J-103	10K	1/6W	CARBON RES	
	R183	QRD161J-103	10K	1/6W	CARBON RES	
	R184	QRD161J-473	47K	1/6W	CARBON RES	

⚠ : SAFETY PARTS

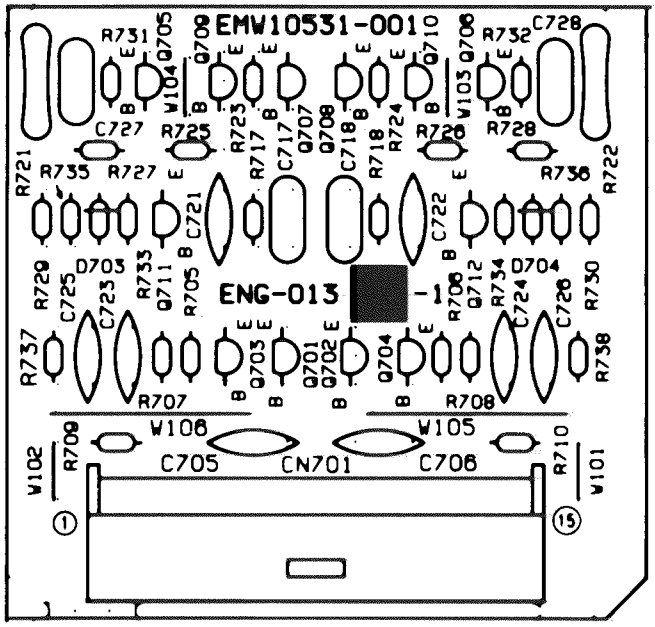
Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10496-203	CIR.BOARD	
		E308963-001	SHIELD BRAC	
	J103	EMV5109-007A	MALE CONNEC	
	L102	EQL4007-150T	INDUCTOR	BS
	L102	EQL4007-150T	INDUCTOR	EF
	L102	EQL4007-150T	INDUCTOR	EN
	L102	EQL4007-150T	INDUCTOR	G
	L102	EQL4007-150T	INDUCTOR	GI
	L121	EQL4007-1R0	INDUCTOR	
	L141	EQL2108-392	INDUCTOR	BS
	L141	EQL2108-392	INDUCTOR	EF
	L141	EQL2108-392	INDUCTOR	EN
	L141	EQL2108-392	INDUCTOR	G
	L141	EQL2108-392	INDUCTOR	GI
	L181	EQL4007-1R0	INDUCTOR	
	T111	EQR7121-004	RF COIL	A
	T111	EQR7121-004	RF COIL	U
	T111	EQR7121-004	RF COIL	UT
	T111	EQR7121-006	RF COIL	BS
	T111	EQR7121-006	RF COIL	EF
	T111	EQR7121-006	RF COIL	EN
	T111	EQR7121-006	RF COIL	G
	T111	EQR7121-006	RF COIL	GI
	T141	EQT2140-021	I.F.TRANSFO	
	T142	ECB1560-010	CERAMIC FIL	
	AT101	EMB41YV-302K	ANTENNA TER	
	CF101	ECB2118-007R	CERAMIC FIL	BS
	CF101	ECB2118-007R	CERAMIC FIL	EF
	CF101	ECB2118-007R	CERAMIC FIL	EN
	CF101	ECB2118-007R	CERAMIC FIL	G
	CF101	ECB2118-007R	CERAMIC FIL	GI
	CF101	ECB2123-006R	CERAMIC FIL	A
	CF101	ECB2123-006R	CERAMIC FIL	U
	CF101	ECB2123-006R	CERAMIC FIL	UT
	CF102	ECB2118-007R	CERAMIC FIL	BS
	CF102	ECB2118-007R	CERAMIC FIL	EF
	CF102	ECB2118-007R	CERAMIC FIL	EN
	CF102	ECB2118-007R	CERAMIC FIL	G
	CF102	ECB2118-007R	CERAMIC FIL	GI
	CF102	ECB2123-006R	CERAMIC FIL	A
	CF102	ECB2123-006R	CERAMIC FIL	U
	CF102	ECB2123-006R	CERAMIC FIL	UT
	EP101	E70225-001	EARTH PLATE	
	FE101	EAF2203-004	FRONT END	A
	FE101	EAF2203-004	FRONT END	U
	FE101	EAF2203-004	FRONT END	UT
	FE101	EAF2203-005	FRONT END	BS
	FE101	EAF2203-005	FRONT END	EF
	FE101	EAF2203-005	FRONT END	EN
	FE101	EAF2203-005	FRONT END	G
	FE101	EAF2203-005	FRONT END	GI
	JA101	EMV7140-L10R	PIN CONNECT	
	LP141	EQF0101-002	LOWPASS FIL	
	SP102	VYH7653-002	I.C.SOCKET	
	SP121	VYH7653-004	I.C.PROTECT	
	XT121	ECX0007-200KWJ1	CRYSTAL	
	XT141	ECXPR46-001A	CRYSTAL	
	XT142	ECB1001-002	CERAMIC FIL	

△ : SAFETY PARTS

■ ENG-013 □ Pre-Driver PC Board Ass'y

Note : ENG-013 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENG-013 [C]	BS	the U.K.
	EF	Continental Europe
	EN	Scandinavia
	G	Germany
	GI	Italy
ENG-013 [D]	A	Australia
	U	Universal Type
	UT	Taiwan

Transistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q701	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q702	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q703	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q704	2SC1775AV(F1)	SI.TRANSIST HITACHI	
	Q705	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q706	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q707	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q708	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q709	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q710	2SA1038(R,S)	SI.TRANSIST ROHM	
	Q711	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q712	2SC2389(S,E)	SI.TRANSIST ROHM	

△ : SAFETY PARTS

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	D703	1SS133	SI.DIODE ROHM	
	D704	1SS133	SI.DIODE ROHM	

△ : SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C705	QCS21HJ-101A	100PF 50V CER.CAPACI	
	C706	QCS21HJ-101A	100PF 50V CER.CAPACI	
	C717	QFN81HJ-152	1500PF 50V METAL.MYLA	
	C718	QFN81HJ-152	1500PF 50V METAL.MYLA	
	C721	QCS21HJ-220A	22PF 50V CER.CAPACI	
	C722	QCS21HJ-220A	22PF 50V CER.CAPACI	
	C723	QCS21HJ-680A	68PF 50V CER.CAPACI	
	C724	QCS21HJ-680A	68PF 50V CER.CAPACI	
	C725	QCS21HJ-680A	68PF 50V CER.CAPACI	
	C726	QCS21HJ-680A	68PF 50V CER.CAPACI	

△ : SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R705	QRD161J-202	2K 1/6W CARBON RES	
	R706	QRD161J-202	2K 1/6W CARBON RES	
	R707	QRD161J-202	2K 1/6W CARBON RES	
	R708	QRD161J-202	2K 1/6W CARBON RES	
	R709	QRD161J-103	10K 1/6W CARBON RES	
	R710	QRD161J-103	10K 1/6W CARBON RES	
	R717	QRD161J-101	100 1/6W CARBON RES	
	R718	QRD161J-101	100 1/6W CARBON RES	
	R721	QRD14CJ-151SX	150 1/4W UNF.CARBON	
	R722	QRD14CJ-151SX	150 1/4W UNF.CARBON	
	R723	QRD167J-152	1.5K 1/6W CARBON RES	
	R724	QRD167J-152	1.5K 1/6W CARBON RES	
	R725	QRD161J-333	33K 1/6W CARBON RES	
	R726	QRD161J-333	33K 1/6W CARBON RES	
	R727	QRD161J-333	33K 1/6W CARBON RES	
	R728	QRD161J-333	33K 1/6W CARBON RES	
	R729	QRD161J-391	390 1/6W CARBON RES	
	R730	QRD161J-391	390 1/6W CARBON RES	
	R731	QRD161J-392	3.9K 1/6W CARBON RES	
	R732	QRD161J-392	3.9K 1/6W CARBON RES	
	R733	QRD161J-392	3.9K 1/6W CARBON RES	
	R734	QRD161J-392	3.9K 1/6W CARBON RES	
	R735	QRD161J-391	390 1/6W CARBON RES	
	R736	QRD161J-391	390 1/6W CARBON RES	
	R737	QRD167J-152	1.5K 1/6W CARBON RES	
	R738	QRD167J-152	1.5K 1/6W CARBON RES	

△ : SAFETY PARTS

Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10531-002	CIR.BOARD	
	CN102	EMV5140-010	VOLUME SOCK	
	CN103	EMV7140-L08R	CONNECT TER	
	CN701	EMV5163-015R	CONNECT TER	

△ : SAFETY PARTS

Accessories List

Symbol No. M 2 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2245A	INSTRUCTION BOOK	1		EF,G,GI
		E30580-2245ABS	INSTRUCTION BOOK	1		BS
		E30580-2246A	INSTRUCTION BOOK	1		EN
		E30580-2247A	INSTRUCTION BOOK	1		A,U,UT
		E43486-371A	INSTRUCTION SHEET	1		BS
	2	QPGA025-03505B	ENVELOPE	2		
	3	RM-SR416U	WIRE-LESS REMOTE CONTROL	1		
	4	R6PRPA-2PSA	BATTERY	1		
	5	EQB4001-015	LOOP ANTENNA	1		
	6	E03614-004	FM FEEDER ANTENNA	1		Except G
	7	EMZ2001-014	ADAPTOR PLUG	1		Except G
	8	BT-20066A	WARRANTY CARD	1		BS
		BT-20134	WARRANTY CARD	1		G
		BT-56001-1	WARRANTY CARD	1		A
		BT20060	WARRANTY CARD	1		BS
⚠	9	EMC0202-001BS	AC PLUG	1		BS
	10	E43486-340A	SAFETY SHEET	1		BS
	11	E67007-001	ANTENNA WIRE	1		G
	12	ENZ2203-001	ADAPTOR PLUG	1		U,UT

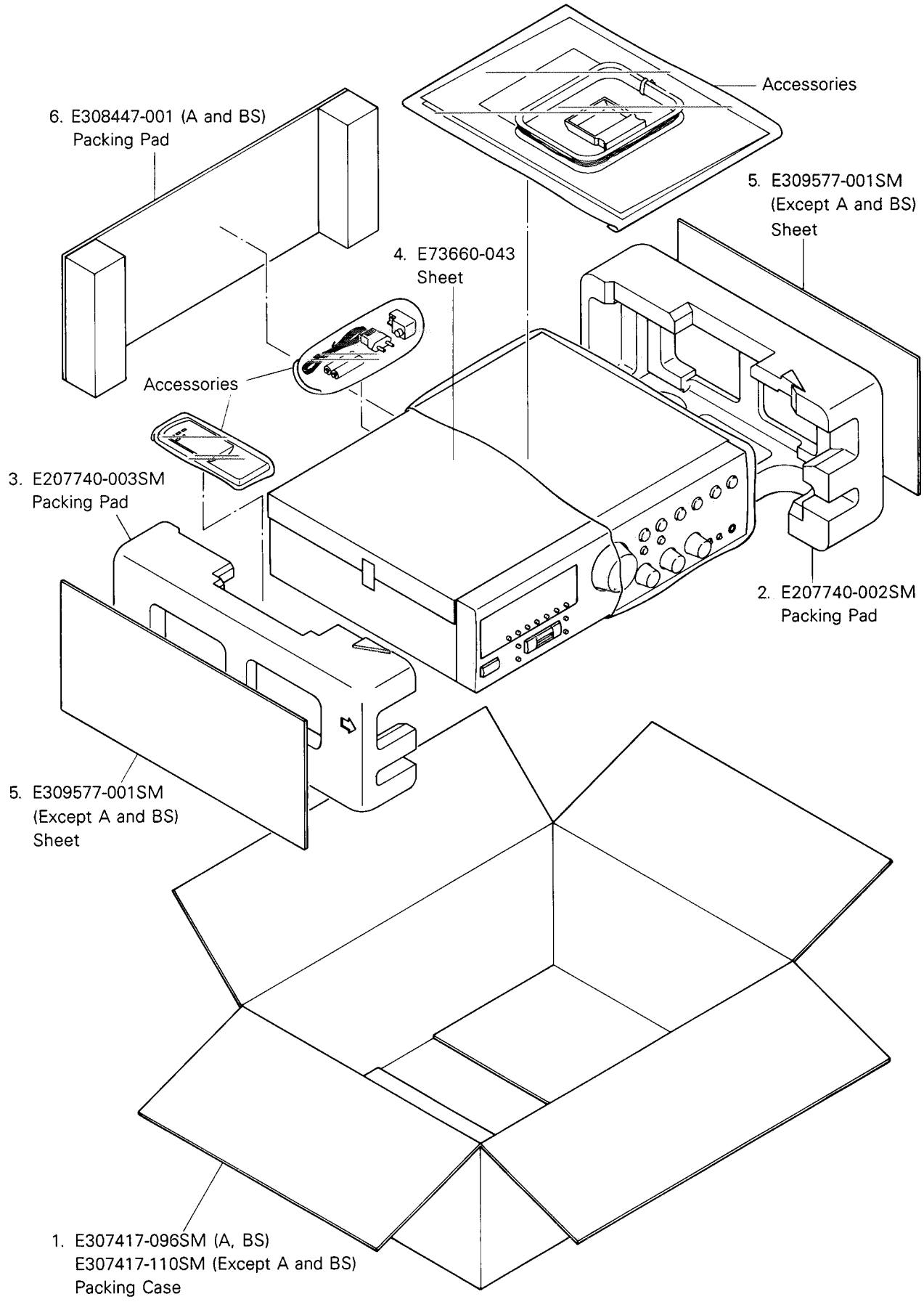
⚠ : Safety Parts

The Marks for Designated Areas

A ..... Australia
BS .... the U.K.
EF ..... Continental Europe
EN .... Scandinavia
GI .... Italy
G ..... Germany
U ..... Universal Type
UT .... Taiwan
No mark indicates all area.

Packing Materials and Part Numbers

Symbol No. M 3 M M



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